THE LANCET.

VOL. I.] LONDON, SATURDAY, DECEMBER 13, 1834. [1834-35.

PHYSIOLOGY.

LECTURES
ON THE
PHYSICAL CONDITIONS
OF THE
TISSUES OF THE HUMAN BODY
AS APPLIED TO THE EXPLANATION OF
VITAL PHENOMENA.

Delivered at the College of France in 1834.

BY F. MAGENDIE,

Professor of Physiology and Medicine in the College.

LECTURE XI.

Resumé.—The Circulation, Pulsation, and Contraction, of the Sanguiferous System, purely Physical Phenomena.—Proofs of the Dilatation of Arteries when the left Ventricle contracts.—Instruments for measuring Pulsation.—Contrast between the Labours of the "Physical" and the "Vital" Physiologists. Illustration from the Discovery of Torsion by M. Amussat.—Explanation and Value of Torsion for the prevention of Hemorrhage.—Evils of Ligatures.—Experiment to indicate the influence of the Heart's Action in producing a Jet from the Veins.—Arrest of the Circulation in Cholera.

WE have now, Gentlemen, followed the arterial system from its source to the minute ramifications which terminate in the origin of the veins, and entered into several considerations connected with the properties residing in them, and which play so important a part in the circulation of the blood. We have shown how elasticity resides equally in the living and the dead artery, manifesting itself by the production of the most striking effects witnessed in this function, as well as in several others of the animal economy; in fact, all the phenomena of the circulation depend on, and may be deduced from, this property of the arterial tissue; for, as it is indisputably above all others the most remarkable, so it is the only one which we can logically attribute to this order of vessels. In studying the circulation from its origin to the termination, from the central organ to the various ramifications which distribute the blood to all parts of the body, you saw how the primary impulse was communicated by a vital power, that is, by the contractions of a muscular, and, consequently, vital organ, the heart; but at the same time you saw, that all the consequences of this original vital act were physical, for when we follow the blood from the heart to the aorta and its branches, we find elasticity coming in to support and modify the effects of the central impulse, we have a physical condition taking the place of the vital one, and reigning predominant throughout the whole system of carrying vessels, whether arteries or veins.

It is unnecessary for me to dwell at greater length than I have done, on the importance of attending to the property residing in the yellow tissue which composes the middle coats of the arteries and veins; if we had, in short, no elasticity, we should not have any of the phenomena attending the circulation; we should not observe the jerking stream when an artery was divided; we should not observe the gentle, continued flow of blood in the smaller vessels; we should in vain attempt to account for the absence of shock in the capillary tubes at each contraction of the heart; in a word, we should find ourselves obliged either to renounce altogether an explanation of the most familiar (though in many respects important) phenomena of the circulation, or to fall into absurdities and errors of the grossest kind, by applying principles which are inadequate to account for the effects attributed to them, and imagining powers which never existed in nature. Even BICHAT himself did not attempt to explain some of the most remarkable conditions of the circulation; he neglected to investigate the cause of the jerking stream of blood in a

large artery, or the uniform continued flow in a small one. In the veins also, the course of the blood is, as you all know, different from that in an artery; the jet from a vein issued during venesection is continued, but does not exhibit the jerk peculiar to arterial hemorrhage: again, the circulation in the interior of our tissues, possesses characters of a distinct nature; thus, when you cut the finger slightly, for example, or during the first incisions of an operation, the blood flows *en masse*, it merely weeps out from the extremities of the small divided vessels without producing a continued stream. These phenomena, Gentlemen, which the advocates of a vital action will in vain endeavour to account for, depend on a combination of the contractions of the heart, with the elastic property of the arterial parietes.

As I remarked to you in my last lecture, you will find a similar combination in the lately-invented syringe, where a reservoir of elastic air converts the alternate motion produced by the piston into a continued one, furnishing an uninterrupted stream of water. This is a most ingenious and useful contrivance, but the principle is by no means new; we have had it before our eyes for many years in the circulation of the blood, but it escaped the penetration of physiologists and physicians, because they neglected to study the mechanical phenomena accompanying the passage of the vital fluid through its several tubes, and were led away from the consideration of facts, to imaginary and speculative theories. If I have been able to arrive at more correct views, it has only been by pursuing a course completely opposite; by regarding what passes before me, and endeavouring to seek explanation in established principles, without having recourse to gratuitous suppositions. The theory which you have heard developed, has been presented to the *Royal Academy of Medicine*, and received the approbation of all the members composing that learned body; indeed, no one opposed the explanation, for it was too evident and too well supported by facts, to admit of controversy.

Elasticity, then, is a most important, I may say, indispensable phenomenon, in the theory of the circulation, and without it we cannot arrive at just or correct inductions. Anatomists and physiologists who have occupied themselves exclusively with examining the intimate structure and arrangement of the human tissues, and neglected their properties, have on this account given the most strange opinions. Some say the arteries are endowed with an independent power of pulsation, and act as so many hearts, with a force totally distinct from that of the central organ, but producing analogous effects; others have gone still further, and in several good modern works you will find a similar property attributed even to the blood itself, which is said to beat when alone, when removed from the vessels in which it is contained. Can any thing be more bizarre or ridiculous than such an idea? How much more simple and more consistent with facts is it to say, that all the phenomena exhibited by the arterial system in relation to the transport of blood, the pulsation, contraction, &c., are purely of a physical and mechanical nature. The pulsation of an artery, a fact which has received so many different explanations, is in my theory easily accounted for by the action of the heart and the elastic quality of the middle tunic; at each stroke of the heart a new supply of fluid is driven into the tube; the latter is, consequently, distended beyond its ordinary condition, communicates the sensation of a shock or pulse, and, by its elasticity, returns to its original dimensions, to be again dilated by the same cause. The dilatation and contraction are most observable in the large arteries, as this is perfectly compatible with the laws of mechanics, for where the moving power and elasticity are greatest, the effects should of necessity be developed in the highest degree.

It is strange how authors overlook the most evident facts when they do not agree with previously-adopted notions: thus BICHAT will not admit the dilatation of an artery at the moment when the left ventricle contracts; and denies, in a formal manner, its contraction and consequent influence on the blood contained within its cavity. But these two phenomena are very evident in the larger vessels, as the abdominal or pectoral aorta, where you have only to place the branches of a compass on the vessel to be convinced that it enlarges and diminishes at each pulsation of the heart. With the smaller arteries it is necessary to make the following experiment: you must expose the femoral artery and vein in a dog, and pass a ligature behind the vessels, which is to be tied firmly at the posterior part of the thigh, in order to confine the circulation in the limb to those two vessels: having done this, measure the diameter of the femoral artery with a compass, and then compress it between the fingers, so as to intercept the course of the blood; you will soon see the vessel commence to contract below the compressed point, and gradually discharge the blood contained in it. Now remove your compression, and permit the blood to penetrate again; at each contraction of

the heart you will see the artery distend, and this goes on until it has recovered its original dimensions.

A distinguished pupil of mine, M. Poiseuille, who has made several interesting experiments and observations on the blood, invented an instrument by which the dilatation and contraction of the arteries are rendered very manifest. This consists of a tube of metal, from the centre of the side of which (equidistant, that is, from each end of the metal tube) another tube (of glass) arises. This glass tube, which thus stands perpendicular to the metal tube, is graduated like the thermometer, and both tubes are filled with a coloured fluid. The great inconvenience of this instrument is this, that the artery must be made to pass through the horizontal or metal tube, and hence, as you can readily conceive, it is only applicable to animals. However, when properly applied, each pulsation of the vessel forces the fluid to ascend in the vertical tube, and thus lays before us an exact account of the force, and several other important conditions, of the arterial system.

Another physician, Dr. Herisson, also imagined a somewhat similar instrument to be applied in the practice of medicine: it also proves the fact of which we speak: here it is composed, as you see, of a small glass tube, about nine inches long, fitted into a reservoir of ivory, containing a small quantity of mercury, and closed at the bottom with that fine membrane of which capotes are made. Nothing can be more simple than the construction of this little instrument, but the results obtained from it are very interesting, and may lead to practical consequences of the highest importance. When you place the membrane which supports the small column of mercury over the traject of an artery, it is clear that if the artery dilates, the mercury must mount in the tube in proportion to the dilatation. The instrument, indeed, was invented to measure the force of the pulse, which it does in a very accurate manner, being divided, like a thermometer, into 80 degrees; but at present I would speak of it merely as a means by which the dilatation of an artery, at the moment of the heart's contraction, is demonstrated and made evident to the senses. I now place the instrument perpendicularly on the wrist of a pupil, over the direction of the radial artery, but you do not see the column of mercury mounting alternately, because, in the present instance, the pulse is not sufficiently developed. Some people you know have no pulse at all; that is, you do not feel the beating of the radial artery in the usual place. This arises most commonly from an irregular distribution of the vessel; or the pulsation of the artery may in reality be so feeble as to escape your notice, unless the finger is pressed with considerable force over its parietes. Let us therefore try some one in whom the pulse is stronger. Ah! now you see the phenomenon which we wished to exhibit very well. At each pulsation of the heart the mercury rises five lines in the tube, and descends as many between each interval of contraction. This proves clearly the fact which we have advanced, viz. the dilatation of the parietes of the vessel; for this is the only means by which the mercury could be elevated so considerably. You may also remark another circumstance tending to confirm our opinion. You cannot fail, if you look closely at the instrument, to observe two or three little jerks, or soubresauts, succeeding each grand pulsation; the column of mercury, after being suddenly elevated to a certain number of lines, exhibits a quivering kind of motion; now this also proves the existence of elasticity as an agent in the production of the phenomenon; for when an elastic body returns to itself, after being dilated, it always gives a little trembling motion analogous to that which you see in the column of quicksilver.

Before we quit the subject of the circulating system, which has already occupied so considerable a share of our attention, it may not be amiss, Gentlemen, to speak briefly of the great difference existing between those physiologists who study the physical conditions of our tissues, and who endeavour to connect them with the various phenomena observed in the circulation of the blood, and those who constantly seek a vital power in explanation of all the circumstances attending the development of this function, neglecting, or laying aside altogether, a consideration of that which is physical as unworthy of notice. The latter have not advanced the science one iota; nor have their labours and ideas, though sufficiently ingenious, been accompanied by any practical or useful results. Did physiology, in short, depend for its advancement on the vitalists, the science would have remained exactly in the same condition that it was in at the time of the ancients, when conjecture and imaginative speculations assumed the place of facts. The other class of physiologists, on the contrary, has made immense progress in the study of the various functions of the human body, and of the agents by which those functions are kept in play, and have arrived at several practical discoveries of high importance.

It is unnecessary to run through the list of those who have improved physio-

logy in latter years, by their pursuing the only true path of investigation. Let one example suffice. M. Amussat, by following up the study of the physical conditions of the arteries, and the effects produced by laceration and twisting of the parietes of the vessels under various circumstances, was led to the discovery of a simple, though most efficacious method for arresting hemorrhage. The torsion of arteries is a process now familiar to every surgeon, and its utility has been established by experiments multiplied in different countries. But consider for a moment how the author was led to the discovery, which I do not hesitate to characterize as one of the most brilliant in modern surgery? Simply and solely by investigating the physical properties of the arteries, and by tracing up the different results of his experiments to the physical phenomena with which they were connected, or upon which they depended. It was a fact known for many years, or rather from time immemorial, and signalized by all authors and practitioners, especially military surgeons, who had frequent opportunities of witnessing it; it was, I say, a familiar fact, that if an artery, even of a very large caliber, be dragged forcibly until it gives way and tears across, the vessel does not furnish the slightest hemorrhage. This was established after long observation and experience, for we could not conclude, a priori, that a torn artery will not bleed, where the same vessel, if divided by a cutting instrument, will furnish a fatal hemorrhage. The fact, however, existed, and was frequently witnessed, either after gun-shot wounds, or in civil practice, in the course of those multiplied and various accidents which are daily produced by machinery. Thus a whole upper extremity has been carried away by a cannon-ball, or may be torn off by a wind-mill, steam-engine, &c.; yet notwithstanding this severe accident, and the necessary injury sustained by the axillary artery, which is, as you know, a vessel of considerable magnitude, not a drop of blood is discharged from the wound, and the patient may recover without hemorrhage supervening, as perfectly and as readily as if the mouth of each divided vessel had been tied by a skilful surgeon.

This, Gentlemen, was a common, and, as I said, a well-known phenomenon of lacerated wounds, but it remained for many years without application to practice, or without receiving any rational explanation on the part of the physiologist; the closure of the arterial mouth was repeatedly observed in men, but the experiment was not followed up in animals, in order to discover the reason why this kind of wound was not attended with hemorrhage; instead of this, recourse was had, as is usual, to the imagination, and an explanation was invented; it was said that the receipt of the injury was immediately followed by a spasm of the vessel closing its orifice, and consequently preventing any subsequent loss of blood; the explanation would be good enough did it exist in nature, but it is easy to see that this alleged spasm exists only in the head of the person who invented it; we have already disproved the presence of muscular tissue in the parietes of the arteries, and you can have no spasm when you have no contractile tube. If we study the various circumstances and phenomena attending the laceration of arteries, we shall be conducted to quite different conclusions. Thus when the artery is torn away too sharply and quickly, the arrestation of hemorrhage does not take place, because the mouth of the vessel remains nearly in the same condition as if it had been divided by a cutting instrument; the sudden laceration produces a clean, uniform wound of the arterial parietes, circumstances which are incompatible with its closure; if, on the contrary, you take the extremity of the vessel between the branches of a forceps, and tear it gently away, the elasticity of the tunics intervenes, and modifies the effect of the injury in a remarkable manner. The internal coat gives way readily as you elongate the artery, but the external cellular tunic does not; it offers much more resistance to the lacerating force, and this circumstance fills a most important part in arresting, or rather in preventing, the development of the hemorrhage, which might otherwise supervene on employing gentle traction; then, as I said, the internal lining tunic is soon torn through, but the external coat continues to yield, it becomes elongated, and diminishes gradually in diameter until at length it closes as it were in a point; thus the elastic extensible property of the cellular tunic of the artery is the sole agent employed to prevent hemorrhage after *arrachement* of the vessel, and is sufficient to close the divided extremity in the most perfect manner, as you shall now see.

Here, for example, is an artery which was torn away yesterday. We now proceed to inject some water into the free extremity, in order to show you how completely the lacerated end is closed, not permitting the passage of the fluid, although a very considerable pressure may be employed. I inject the water, and you see that nothing but a mere drop exudes from the lacerated extremity, which presents a

kind of conical appearance, from the elongation and gradual contraction of the cellular coat: but remark, that a little water may escape from the end of the vessels, though it would be quite impervious to the blood, as the latter fluid gets entangled in the fibres of the cellular tissues, and soon forms a coagulum which renders the closure as perfect as possible: in laceration of the living artery this always takes place, and contributes in no small degree to the success of the operation.

Here is another artery, taken from a leg: we tore the vessel away this morning, and it now resists, as you see, the passage of water, though I press the piston of the syringe with a good deal of force: this experiment is sufficient at once to overthrow the idea of a spasm in the lacerated mouth, for a muscular spasm would not remain after death, not to mention that we may obtain similar results by experimenting on the arteries of the dead subject, for the effects depend on physical properties, not on vital ones. This method of stopping the effusion of blood from a divided vessel was first tried upon the smaller arteries, and found to succeed perfectly. M. Amussat, therefore, came to the conclusion that in the human subject it might be so applied as to supply the place of the ligature.

The invention of the ligature forms an epoch in the history of our art: nothing, in fact, contributed more to the advancement of surgery than this grand discovery of the illustrious Pare: before that time a bleeding artery was either intrusted to nature, or the patient was tormented by the application of the most painful styptics; a limb was amputated, for example, with a hot knife, the stump was plunged into boiling oil, or repeatedly cauterized with a heated iron: these imperfect and dangerous measures were superseded by the application of a ligature directly to the injured vessel,—a means at once simple and in most cases efficacious; but we cannot conceal the fact, that the application of the ligature is sometimes accompanied by very great inconveniences. I have witnessed many examples of this in the course of hospital practice: there I have seen a ligature placed on the femoral artery, but the blood still continued to flow; four or five others were applied successively up to the groin with equal want of success, and the patient died of hemorrhage. This, unfortunately, is not a solitary case, but occurs every now and then, showing that under certain circumstances the ligature fails to attain the desired object, and gives rise to severe accidents. Again, when the thread composing the ligature is too fine, or the latter is drawn too tightly, the arterial tunics are divided before inflammation sets in, and secondary hemorrhage of the most alarming and dangerous nature takes place. Finally, the ligature may embrace other parts besides the vessel, and this is an accident which has occurred in the hands even of the most experienced and dexterous surgeons. How often does it occur that a nerve is included by the same thread which surrounds the artery; and how often is the result of an operation, otherwise perfectly well performed, rendered fatal by this unfortunate and, as it would seem, sometimes inevitable mistake!

If then we can obtain any means of completely closing the extremity of an artery so as to remove any danger of subsequent hemorrhage without the inconveniences arising from the introduction of a foreign body into the living tissues, we arrive, I say, at a great practical discovery, and this is done by torsion of the arteries. The efficacy of this new method has been placed beyond all doubt by the experiments of M. Amussat, and the trials which have been made on the human subject at Paris and several other capital towns of Europe. When the artery has been properly twisted, it never permits the escape of blood from its extremity. In this respect torsion has a manifest superiority over the ligature, for should the latter give way, as occasionally happens soon after its application, the blood immediately begins to flow, and the patient's life is endangered, because some time is required for the complete obliteration of the vessel. The ligature, in short, is only a temporary means, a mechanical obstacle destined to produce effects of a permanent nature. But this is not the case in torsion; when the form and properties of the arterial extremity have been once changed by the process of twisting, they are never recovered, and it is impossible to renew the course of the blood through the tube. I have frequently made the experiment on arteries of different calibers, and have invariably found the extremity impervious.

In performing the operation of which we speak, there are one or two circumstances to which it is indispensable to attend. In the first place, before you commence to twist the vessel, it is necessary to press it strongly between the blades of the forceps, in order to obtain a complete division of the internal and middle tunics. This may be done without injuring the external coat, which you are to twist gradually until the elasticity of the cellular tissue surrounding the artery and composing its external membrane has been completely destroyed. In consequence of this loss of elasticity, the cellular coat

retains the position given to it, and closes the extremity of the vessel in the most perfect manner. It is astonishing with what force a twisted artery will resist an artificial current of fluid pushed through the main trunk. You will sooner burst the artery itself, than succeed in driving water through the point upon which torsion has been properly exercised. Here is an example of this: A portion of the radial artery has been fixed on the nozzle of this syringe, which is full of water, the other extremity of the vessel has, as you see, been twisted. I now inject the fluid into the artery. I depress the piston with great force, but not a drop issues from the twisted end. The water escapes rather between the pipe and upper extremity of the vessel. I increase the force of the injection without producing any result. The point below is impervious, although the water exudes through the parietes of the artery.

The effect which you have just now witnessed in the dead artery, takes place equally in the living one, or even in a more marked degree, because the coagulation of the blood is added as a secondary means. Torsion may, therefore, be justly regarded as a most perfect and sure agent in producing obliteration of the divided extremity of an artery, and M. Amussat is entitled to the merit of having made a most useful and brilliant discovery.

I have adverted at some length to the torsion of arteries, because I would wish to impress on your minds this consequence of my observations, that the science of physiology is not to be advanced by pursuing the study of certain pretended vital phenomena which do not exist; but that, on the contrary, we can only hope to obtain useful and important results by following up that which does exist, which is always accessible to our senses, and capable of being made the subject of experiment, viz. the physical properties of the human tissues. Some of the advantages attending the discovery of torsion have already been pointed out to you, there are many others no less evident and striking. Thus, for example, in operating for cancer, where we have to remove a breast extensively diseased, we are often obliged to tie the vessels while surrounded and enveloped in a mass of hard extraneous substance, which adds considerably to the embarrassment of the operation, and may have no slight influence on the chances of a relapse. Here the vessels may be twisted with great advantage; by employing torsion, you avoid the introduction of a foreign body into a wound already very irritable, you are not obliged to disturb or injure the surrounding parts as in seeking to apply a ligature; while, at the same time, you are confident of having closed the mouths of the bleeding vessels instantaneously, and in the most efficacious manner.

Finally, the substitution of torsion for the ligature is clearly indicated after all operations where we may think it advisable to obtain union by the first intention. This is a point which no one can contest, because granting (as experience has proved) that there is no danger of hemorrhage supervening, you place the wound in the most favourable circumstances for immediate healing.

There are several other points, Gentlemen, in relation to the arterial system, which remain to be examined; but we must defer them for the present, as we have to make one or two experiments which you ought to have seen in the course of our last lecture.

The object of the experiment we are now about to perform is to illustrate a fact of which mention has been already made, viz. the influence of the heart's action in producing a jet of blood from the veins. I attempted to explain this by reference to an experiment at the conclusion of our last lecture, but the experiment I stated was not so decisive or successful as I could have wished. This depended on a circumstance of which I was not at the time aware, and which perfectly accounted for our failure. The animal was very feeble. Besides, three-quarters of a pound of water had been injected into his veins some time before. Now when a quantity of water is thus suddenly introduced into the economy, it gives rise to several remarkable symptoms, and produces in general a powerfully sedative effect; this was precisely the case in the instance of which I speak. The water thrown into the circulation for another object, acted on the heart, and induced such a feebleness of the central organ, that its ordinary effects on the motion of the blood were not witnessed, and when the vein was opened, I did not remark any jet.

This phenomenon calls to mind one of the chief circumstances of the fatal epidemic which prevailed here the year before last; viz., the stagnation of the blood in the venous system, which is so characteristic a symptom of Asiatic cholera. This depends on the diminished, one might almost say, annihilated power of the heart, which is one of the first phenomena remarked in a patient attacked by this disease, and which perfectly explains the absence of pulse, coldness of the extremities, peculiar tint of the skin, &c.

But to return to our experiment: we have chosen a much stronger dog than the last, and have taken care to avoid everything which might influence in an unfavourable manner the production of the wished-for result, for these experiments are difficult, and require a great deal of caution and management; the crural vessels of the hinder leg have been exposed; here they are, the artery and vein running close to one another; the main nerve has been cut away. If the parts be left in the condition in which you now see them, we shall not be able to obtain the proper phenomena, because the collateral branches would constantly furnish an intermediate current of blood; it is therefore necessary to pass a circular ligature round the limb, above the point where the vessels are exposed, but not embracing them; by this means the circulation in the leg will be confined to the femoral artery and vein. Having taken this necessary precaution, I now place a ligature on the femoral vein, and make a small opening through the parietes of the vessel; the jet of blood is, as you see, very strong, though small, but the alternate impulses of the heart are not marked by the alternate elevations of the stream; of this you already know the reason. I now take the artery between the forceps, and compress it a little; the jet diminishes at once; I increase the compression, and the stream continues to fall; it is lower, lower, lower, and now it has ceased altogether. When I withdraw the forceps and give free liberty to the artery, the force of the heart is permitted to be felt, and the stream immediately recommences to the same extent as before; when, on the contrary, I press on the parietes of the artery, the jet, which was more than a foot in height, falls, as you see, to a few lines; it does not cease altogether when the cavity of the artery is obliterated, and the passage of blood through it is, consequently, stopped, for the venous system being full of fluid, and endowed with a high degree of elasticity, continues the jet by its proper action for a short time after the motion communicated by the heart has been interrupted.

If you examine the condition of the artery during the production of these phenomena, you will see that it contracts gradually, and ends by expelling completely all the blood contained in it; at this point of the experiment the stream from the vein ceases; now let us cease to compress the artery; the blood is driven on in its former channel by the contraction of the heart; as soon as it arrives in the small branches of the vein, the blood begins to trickle from this latter, and the jet is re-established as before. We now vary the experiment a little, the artery is compressed, and has emptied itself as you see, but instead of removing the pressure suddenly, I permit the blood to enter only slowly, and by degrees; the hemorrhage from the vein returns, but it is a jet until full play is given to the heart's action by leaving the artery free from all restraint.

I now proceed to make an experiment which is even more decisive than the former. The impulse of the heart will be replaced by artificial means, and you will witness analogous effects. I now push a quantity of warm water into the femoral artery, and the jet from the vein is immediately increased in proportion. I cease to act on the piston. The stream falls considerably, as you must remark. This is done several times, and the result is always the same. The more forcibly I inject the warm water, the more perfect and rapid is the jet from the vein. Were the animal larger, you would see this much better. What you have witnessed, however, is sufficiently convincing, for nothing, in my opinion, can prove more directly the easy and immediate passage of fluid from an artery to a vein, and the manner in which the contraction of the heart produces this effect in the living subject.

UNIVERSITY OF LONDON.

CLINICAL LECTURES

DELIVERED AT THE

NORTH LONDON HOSPITAL,

BY

A. T. THOMSON, M.D.,

Physician to the Hospital, and Professor of Materia Medica in the University.

LECTURE I.

ACUTE RHEUMATISM.—*Influence of Constitutional Treatment.*

GENTLEMEN,—Since my last lecture, four cases of acute rheumatism have been admitted under my care into this hospital, and I believe my colleague Dr. ELLIOTSON has also taken in some cases of this disease. The number of such cases is not remarkable at this season of the year, for although the disease appears at all times, yet it more especially makes its attack in autumn. It is not easy to account for this fact, unless we suppose that the changes of season operate upon the body nearly in the same

manner as changes of climate. Thus we know that when a person passes from a dry and genial, or moderately warm climate to one which is humid and relaxing; and more especially if this humidity be accompanied by a low temperature, congestions of blood take place in the larger vessels, the body becomes susceptible of the impression of moisture in a remarkable degree, and agues, rheumatism, and similar diseases, are produced.

Among the cases of this disease which I have taken in, one is in a state of convalescence, and will be discharged before we again meet; it is that of *Hannah Susans*, a maid servant, eighteen years of age, who was admitted on the 7th of this month. This woman is of a sanguine temperament and a spare habit of body, and she says that she has generally enjoyed good health. She was attacked four days previous to her admission into the hospital with shiverings, succeeded by heat, with little perspiration, and these returned in successive paroxysms for two days, accompanied by dull aching pains in the joints, which increased so much in violence, that she was forced to leave her place and return home to her friends, who procured medical advice for her. She says that she received much benefit from the treatment pursued; but, as the pains increased in violence, and she could procure no sleep on their account at night, she came into the hospital. She attributes her complaint to sleeping in damp sheets.

Now this, or indeed the application of moisture and cold to the surface of the body in any manner, is one of the most frequent sources of acute rheumatism. But many individuals may be exposed to cold and moisture without suffering from acute rheumatism, thence a question arises—Is a certain condition of the body, a predisposition, necessary before this disease can supervene on the application of these exciting causes? In the case before us, I have not been able to ascertain the existence of any hereditary predisposition, which undoubtedly may be regarded as frequently rendering the system prone to be roused by any excitement into inflammatory action. Our patient is of a spare habit; there is no general hyperæmia, or excess of the circulating fluid; but, in her occupation, that of a servant, she was exposed to irregular heats and chills; and, consequently, retiring to a damp bed, whilst probably in a state of perspiration, it is easy to conceive that the atony which the application of the cold and moisture would produce in the cuticular capillaries, extending by sympathy to the rest of the circulating system, would produce a congestion in the large vessels. It is the effort of the conservative power of the constitution to overcome this state that produces the phenomena of the febrile paroxysm, and by the unequal distribution of the blood probably sets up the inflammatory action in the joints which constitutes this form of disease. Be this as it may, there can be no doubt that, in almost every case of acute rheumatism, as in that which is under consideration, the febrile symptoms precede the attack of pain; and consequently the latter may be regarded as one of the indications of the presence of a peculiar fever, with as much reason as we regard the eruption of small-pox, or that of scarlatina, as obvious symptoms of peculiar fevers.

At the time of her admission, the patient complained chiefly of severe pains of the knees, joints, and elbows, which frequently moved from one limb to another, and were always increased by warmth, and at night. She also complained of slight pain on pressure over the epigastrium; the tongue was furred; the pulse 100, and hard; the bowels were regular, and the urine was natural. The catamenia had been absent for three months. This last circumstance, as the patient was not pregnant, displayed a derangement of health, and no doubt tended to render her more susceptible of the impression of the exciting cause than she otherwise would have been. She was ordered to take one grain of *calomel*, one of *tartar emetic*, and one and a half of *opium*, every eighth hour; and in the intervals ʒi of the *wine of colchicum*, with gr. xv of *magnesia* in f. ʒij of water. It may be necessary to mention here my reason for combining the magnesia and the wine of colchicum, an union by no means uncommon. In my practice it arises from a conviction, that much of the benefit of colchicum is due to its action on the orifices of the gall and pancreatic ducts in the duodenum, bringing into the gut the redundant secretion which always takes place in those important glands in a febrile condition of the habit; and, by carrying them out of the system, getting rid of one source of irritation, and enabling the circulation to proceed with more freedom and regularity. Now, when much acid exists in the stomach, the colchicum becomes too active, and passes too rapidly through the duodenum; so that, removing this by the addition of the magnesia, we can with more certainty reckon upon its influence being exerted on the orifices of those important ducts which open into the first gut, and the emptying of which is of so much importance. Our patient found great relief from this treat-

ment, which was continued with little variation until the 10th, when the pains returned with as much violence as ever. The tongue, which had been previously cleansing, became again loaded; but the pulse did not increase to more than 84, and was small and sharp. She was ordered gr. viij of *calomel*, and a brisk cathartic to be taken about an hour afterwards, and to continue her pills and mixture after the bowels had been well purged. Notwithstanding this active treatment, the febrile symptoms and pains increased during the two following days, and, in the afternoon of the second day, she complained of severe pain in the back of the neck, and in the occiput. Finding that the sedative plan of treatment alone was not succeeding, I ordered her to be bled to the extent of twelve ounces, and to take immediately afterwards a pill containing a grain of *calomel*, a grain of *tartar emetic*, and two and a half grains of *opium*, and to repeat this, if the pain should continue, every sixth hour. This method of following blood-letting by a large dose of opium with calomel, often supersedes the further use of the lancet. It operates in two ways, the calomel carried into the system stimulates the inactive capillaries, converting morbid into healthy action; whilst the secondary influence of the opium tends to allay that irritable state of the nervous system which always is more or less present under the condition of the frame which accompanies rheumatic fever, and which is justly regarded as the pabulum, if I may so express myself, of inflammation. To prevent the recurrence, however, of the pains, I resolved also to take advantage of the contra-stimulant influence of tartar emetic in moderate doses, I therefore ordered gr. i to be administered in solution every sixth hour. She has had no return of pain, she sleeps quietly, and complains of nothing except debility. She is now taking three grains of the *bisulphate of quinine* three times a day, and if she gain strength she will be fit to leave the hospital in two or three days.

You will perceive, Gentlemen, in the treatment of this case, and you will observe it in many future cases treated here, that no attention was paid to the local part of the disease, the remedies being directed solely to the relief of the constitutional disorder; and you will reconcile this to the opinion which I have previously advanced, that the local pains are so completely symptomatic or dependent on the febrile disturbance, that the speedy reduction of this by vigorous measures, invariably removes the pains without any local treatment. In the early part of my professional career, it was very much the custom to employ repellent embrocations in rheumatism; but the result of this practice was frequently the migration of the pains from joint to joint; and, occasionally, I have seen the inflammation transferred, by metastasis, from a joint to the heart, the stomach, or the brain, and a case terminate fatally, which, by general management alone, might have been successfully carried on to a favourable issue. I have no hesitation, therefore, in strenuously recommending you, in all cases of acute rheumatism, to leave the relief of the local affection to the influence of the constitutional treatment.

SCROFULA.—*Employment of the Hydriodate of Iron.*

Another case, which is in a state of convalescence, and about to leave the hospital, is one of scrofula, in a boy named *Knowles*.

This boy displays, in a striking manner, the characteristics of the strumous diathesis: namely, a thin fair skin, with full, watery, blue eyes, a flabby soft state of the muscles, a general irritable condition of the nervous system, and a deficiency of tone. It is scarcely necessary to say, that this disease exhibits itself under every variety of symptoms, so that no two cases are alike. In the instance before us, the disease is displayed chiefly in cutaneous eruptions; the submaxillary glands were swollen and hard, and on one side tender to the touch. The eruptions were of a pustular description on almost every part of the body, appearing in irregular patches, whilst the greater part of the scalp on the back of the head was nearly one entire crust of porrigo larvalis. The abdomen was large and tense, and there was evidently obstruction of the mesenteric glands.

The person who brought this boy to the hospital, stated that he had scarcely ever been free from swellings and eruptions, which she attributed to the libertine habits of his father, who had more than once communicated syphilis to his wife. There was no reason, however, for attributing this boy's symptoms to the influence of the syphilitic virus. It might be more justly regarded as depending on bad and defective nourishment, improper clothing, and poor lodging, operating on a habit naturally strumous. The method of successfully managing the case was very clear. It consisted in bringing up the tone of the habit, and exciting a new and more healthy action in the torpid glands. This was to be effected partly by

medicine and partly by diet, regimen, and exercise of the body and mind.

Evacuants were not indicated, except merely as prefatory to the after treatment, or preparing the stomach and alimentary canal to be affected by those other remedies, the employment of which was more decidedly indicated. A calomel powder and a purgative were therefore prescribed to empty the bowels; the head was directed to be shaved, to enable any topical application to be properly used. He was ordered a full diet; and it only remained to select that tonic which was most likely to fulfil the intentions which must always be kept in view in such cases, namely, to bring up and maintain the tone of the habit, and at the same time afford a fresh impulse to the capillary organs. The *Hydriodate of Iron*, inasmuch as it combines the deobstruent powers of iodine with the powerful tonic qualities of the protoxide of iron, seemed admirably adapted to answer every indication. It was, therefore, ordered, in the form of solution in water, in doses of three grains, three times a day. No topical means were employed, except daily ablutions with soap and water, and a small portion of the diluted citrine ointment (*Unguentum Hydrargyri Nitratis*) applied to the hardened scabs of the scalp. He was ordered full diet, which comprehends a moderate allowance of animal food; and the nurse of the ward was directed to occupy him in every way in which she could make him serviceable. Under this treatment he has been progressively and daily improving, the eruptions have disappeared, the swelled glands are reduced and softened, he eats and sleeps well, and is in such a condition as will enable him to leave the hospital in the course of a few days. Indeed he is now kept rather with the view of giving him a little additional strength from good, wholesome diet, than from any further necessity for medical treatment.

This is another, of many instances, of the value of the *hydriodate of iron*, in the treatment of scrofula.

PERIPNEUMONIA.—*Depressing Mental Influences and Cold.*

There is one case to which I would earnestly direct your notice, although it is still in progress, and the issue is uncertain. I refer to that of *Ellen Wilkinson*, a soldier's wife, who was admitted on the 10th, labouring under pneumonia. She stated her age to be 37, although in appearance she is double that number of years. About three weeks before she was admitted she lost her husband, who died suddenly of cholera, without her seeing him, which so preyed upon her mind, that she scarcely knew what she did; and instead of retiring to bed, she walked about her room, and stood undressed, at the open window, in the night air. Until this time she has enjoyed good health, but immediately after the event alluded to, she was attacked with cough and violent pain and tightness across her chest, with dyspnœa, for which she was bled and blistered, and obtained some relief. These symptoms existed when she was admitted into the hospital; and, in addition, she complained of tenderness on pressure over the whole of the abdomen, but greater at the epigastrium and right hypochondrium. The pulse was 100 and thready; the tongue dry, red, and partially covered with a brown fur; the stomach so irritable that she retained nothing on it; her expectoration was copious, and consisted of a tough viscid mucus, streaked with blood; and she had profuse night perspirations. The countenance of the poor woman was indicative of great anxiety and uneasiness of mind, and she occasionally wandered.

With these symptoms there was no difficulty in naming the disease. It was evidently *peripneumonia*. The history of the case is extremely instructive, inasmuch as it demonstrates the influence of depressing passions in predisposing the habit, either generally or partially, to inflammatory action. In this case the sudden grief of the poor sufferer, as is usual in such cases, lowering the general tone of the system, and destroying, as it were, the balance of the circulation, caused the lungs to become the seat of sanguineous congestion, and inflammation was set up by the application of what was an adequate exciting cause, namely, cold,—probably damp night-air. The febrile reaction which follows the rigor that usually occurs as its prelude, generally discovers any morbid disposition of particular organs that may have previously existed. Thence, in this case, the gastro-enteric mucous membrane, as well as the lungs, become the seat of morbid excitement; a condition which was displayed in the tenderness of the epigastrium, the reddened tongue, and the great irritability of the stomach.

Although the brain rarely suffers in peripneumonia, yet delirium sometimes occurs; its appearance in the case before us is not wonderful, if we reflect on the state of mind of the patient when the attack commenced. It was also pretty clear, that the inflammatory action embraced the general bronchial membrane, from the viscid nature of the sputa, tinged with blood. The quantity of this mucus, filling the bronchial tubes, aggravated

greatly the dyspnœa; and preventing the necessary change in the pulmonary blood, depressed still more the powers of the habit, and threatened to give the attending fever that low typhoid type, which is often the immediate forerunner of the fatal termination of the disease. The tendency to this condition was evident from the thready state of the pulse, the pallid skin, the sharp spasmodic action of the heart, discovered when the ear was applied to the chest, as if it were labouring against the obstacles to the normal state of the circulation, which were overpowering its action.

I have detailed the history of this case, and the instructive inferences to be deduced from it, to direct your attention to it, and its progress and termination, whether it may turn out favourably or otherwise, for the *prognosis* is very uncertain. It is not my intention, nor would our time permit me, to enter at present upon the details of its treatment. It is one of those cases which are full of interest to the practitioner and instruction to the student. I am, therefore, anxious that you should watch it closely, before I have occasion to make it the subject of comment in a future lecture.

HEMIPLEGIA.—*Rupture in the Cerebrum and Extensive Effusion.*

The last case which I have to bring before you at present is one that has terminated fatally, and afforded us a very instructive post-mortem examination. It is that of *J. Guy*, a man 70 years of age, who was admitted on the evening of the 11th instant. As neither my clerk nor myself was in the Hospital when he was brought in, the history of the case is very imperfect, and contained in few words. It states that "Joseph Guy is a carpenter, with a wife and four children: that he complains of a severe pain in the left side of the chest, which has existed for a day or two; and that the only answer which can be obtained to any questions put to him is, that he is very ill, and would like to have some brandy. His pulse was full and bounding, and 112. He was bled to ℥xvj. The blood was cupped and buffed." Such was the scanty history of the case. On seeing the patient on the following day, I found that the left side was hemiplegic; that he was comatose; and that there was every reason for thinking that effusion of blood had taken place in the brain. He was treated in the manner which I shall afterwards state to you, with apparently temporary benefit, as the sensibility was roused; he spoke and protruded his tongue, and swallowed, but the coma gradually increased, apoplectic stertor supervened, and he died on the evening of Thursday, the 13th.

Although the nature of the attack was very evident to me, yet, as it was important to verify the diagnosis, the body was opened by Mr. TAYLOR, on Saturday, in presence of Mr. QUAIN and several pupils. The state of the brain, the contents of the thorax, and those of the abdominal cavity, were minutely examined. The autopsy verified, in the most satisfactory manner, the diagnosis which had been given, and afforded much matter of instruction.

Before describing the appearances, permit me, Gentlemen, to remark that the great value of post-mortem examinations does not consist in a mere exhibition of diseased appearances, however obvious these may be; but the advantages of these examinations are derived from the means which they afford us of explaining the symptoms which have characterized the disease, so as either to confirm the propriety of the practice which has been pursued, or to detect the errors that may have been committed.

This was one of those cases in which the effusion of blood arises from a physical lesion, or rupture of a vessel, a circumstance more frequently occurring in the brain than in other organs. It verified the observation that the hemiplegia generally occurs in the side opposite to that on which the effusion has taken place. In this instance the paralysis occupied the left side, and the blood was found in the substance of the right hemisphere. But it is rather at variance with the statement that both sides are paralyzed when the blood is poured into the ventricles, or is effused on the surface of the brain: for here the blood had found its way not only into the ventricles, but clots were deposited on the outer surface of the corpus callosum, and the opposing sides of the hemispheres immediately over it.

The state of the effused fluid is also worthy of notice; the quantity in the substance of the hemisphere formed a tolerably firm, irregular, or lobulated coagulum, and the same appearance was presented by the blood thrown upon the surface; but the ventricles contained fluid blood, and that was thinner and displayed more serum than usual. In the clot, the colour approached to black; in the ventricles, it retained its natural hue, except that it was a shade paler. The cerebral substance, in contact with the clot, seemed to be broken down, as if the medullary matter had been irregularly absorbed, to make way for the effusion from the ruptured vessels. Beyond the walls of the excavation, the cerebral substance did

not display any traces of compression. It must be admitted that this does not imply its absence; for, if compression had previously existed, and if elasticity be one of the attributes of medullary matter, it is easy to conceive that as soon as the brain was relieved from the confinement of the cranium, it would, as it were, right itself in this respect, and lose the character of compression, which would have been seen were it possible to examine the organ within the skull.

It might become a question whether, in this case, the effusion arose from the rupture of a vessel from causes operating within the body, or from external violence, namely, a fall or a blow. The appearances are, certainly, more favourable to the former than to the latter supposition; inasmuch as the effusion, which is the result of mechanical violence, is generally found in numerous isolated spots, or in groups: whilst that depending on a determination to the organ greater than the vessels can sustain, is generally in one irregular mass, confined to the excavation which it causes, or finding its way into the cavities and to the surface, owing to the thinning of the walls of the excavation, as in the instance under consideration.

It is curious to remark the variations of symptoms that occur in similar diseases, even when the causes, as far as they can be traced, are in every respect the same. In this case, notwithstanding the extent of cerebral injury, there was no distortion of the face, no drawing of the angle of the mouth to the sound side; the tongue was protruded in a natural manner, the speech was little affected, and the deglutition was unimpeded. The paralysis, in fact, was confined to the external muscles of the affected side. Had not the coma been so considerable, these circumstances would have led to a more favourable prognosis, in this case, than we ventured to offer; for experience has amply demonstrated that hemiplegia, connected with simple rupture in the cerebrum, is that form of the disease from which a patient is most likely to recover, if the effusion be circumscribed, and not very extensive. When recovery occurs, the coagulated clot is either gradually converted into a firm fibrous tissue, which is at length reduced almost to a membrane, that forms, as it were, the cicatrix of the cerebral lesion; or it becomes "a loose cellular tissue," as Dr. Carswell has stated, filled with a serous fluid, and is generally traversed by a considerable number of bloodvessels. As the quantity of serous fluid increases, that of the cellular tissue diminishes, as well as the number and size of the bloodvessels with which it was before provided. It is this portion of cellular tissue which lines the internal walls of the excavation, and forms what is called the *apoplectic serous cyst*. When a complete cure is effected, not only the cyst, but the cicatrix formed by the approximation of its walls, disappears. It is in this manner that the habit rids itself of the blood effused in such cases; and it is remarkable, long before this happens, how completely the brain accommodates itself to the foreign matter deposited in it. Even extensive as the effusion was in this case, had the blood been confined to the cavity which held it in the hemisphere, instead of being poured into the natural cavities, and upon the surface, I should not have despaired of the favourable termination of the case: but the augmentation of the coma, and other apoplectic symptoms, gave room for nothing favourable in the prognosis, and I regarded the case as a lost one on the second day after it was brought in.

In the other cavities of the body, the thorax and the abdomen, there was little to be observed: the lungs were quite healthy; and, except some degree of induration in the right lobe, the liver was also in its ordinary condition. Yet, even in this state of the liver, which more or less presents an obstructing cause to the free passage of the blood through the organ, we perceive one source of the congestion in the cerebral vessels. The nature of the circulation renders this at all times hazardous; for, as the limit to distention which exists there prevents the simultaneous expansion of arteries and veins, so, when a rush of blood to the encephalon takes place, the capacity of the veins is diminished in the direct ratio of the enlargement of the arteries; and thus the movement of the blood through the brain and its return from the heart is impeded, in a degree sufficient to distend the arteries to their utmost; and, if debility or previous disease have existed, we can have no difficulty in conceiving the manner in which the rupture will occur in such a condition of parts.

With regard to the treatment, the first object was, to diminish arterial action within the cranium, so as not only to prevent the further pouring out of blood, but to favour the formation of a clot over the ruptured vessel. The rapidity and force of the pulse indicated the necessity of this abstraction of blood; and the temporary benefit which followed demonstrated the propriety of the measure. The age of the patient, and his habits of life, did not admit of a large bleeding; and although the blood presented the buffy coat, and was greatly cupped, yet the second bleeding was advisedly less than the first. It is

necessary, Gentlemen, that I should record my firm belief, that abstraction of blood from any vessels, either arteries or veins, without the head, cannot diminish the quantity present in the brain, and thus take off existing pressure; whilst, on the other hand, the large abstraction of blood may diminish action to a degree bordering upon torpor, and thereby lessen the cerebral energy and produce syncope, and at the same time prevent that action in the absorbents which is requisite for carrying off what has been already effused. The blister was applied rather in conformity with routine practice in such cases, than from any conviction of benefit likely to be derived from it.

I trust, Gentlemen, that these remarks may prove useful to you in a practical point of view; and that the time spent in such investigations is not one of light and transient interest.

TREATMENT OF

PULMONARY CONSUMPTION

BY

INHALATION.

To the Editor of THE LANCET.

SIR,—From the liberal manner in which the first edition of my Cases of Inhalation was noticed in your number for January 1831, and from the interest shown by the reviewer in the inquiry, I am induced to hope that a further contribution on the subject may prove acceptable for insertion in your widely-circulating Journal.

I remain, Sir,
Your very obedient servant,
CHARLES SCUDAMORE.

Wimpole Street, Dec. 6, 1834.

I regret that a great deal of scepticism still appears to prevail as to the merits of inhalation, and especially as regards phthisis pulmonalis, for, I believe, its utility is not questioned in chronic bronchitis, and in certain forms of asthma.

Some are disposed to throw ridicule, and a few even calumny, on any professed attempt to cure tubercular consumption; but such adversaries do not deserve one moment's consideration. We owe it equally to science and to humanity, to make unceasing exertion to lessen, to the utmost of our power, the influence of this destructive and fatal scourge.

A few call in question the propriety of employing any active agent to be administered by inhalation, alleging that the danger of producing injurious irritation to the air-passages and the lungs, is more certain than the chance of removing the tubercular disease. The fact, however, is, that in no form of pulmonary complaint does inhalation relieve with so much promptitude and certainty, as in chronic irritation of the bronchial mucous membrane; and with respect to the tubercular irritation, I am willing to rest the whole proof of my recommendation upon actual experience, and the large share of success which I have obtained.

It unfortunately happens that a great proportion of cases of phthisis pulmonalis have acquired so much inveteracy as to be incurable, when they are first presented to the physician's care. Too probably, little or no attention has been paid to the first inroads of the disease; it makes progress with sure but insidious march; and when, at last, an anxious appeal is made for medical exertion, the lungs may have undergone such extensive disorganization as to allow of no other possible relief than some mitigation of the symptoms.

Failure of success on such occasions ought not to impair the credit of the mode of treatment which I am advocating; but I am too well aware that this serious disadvantage to the *good character* of inhalation is always more or less incurred when the case ends fatally, notwithstanding that only slight, if any, hopes of success might have been held out to the friends of the patient; for with regard to the patient himself, we must sustain his mind by kind encouragement. The despondency of the invalid would greatly diminish our power of affording relief.

The most frequent cause of regret which I have to experience, is the delay of the patient, or of the friends of the patient, to make a timely application for the material benefits to be afforded by inhalation. There is, undoubtedly, a satisfaction in mitigating sufferings, but yet the task is a melancholy one of watching the progress of a disease which has become incurable.

For the better comprehension of my statements in the following cases, I take the liberty of referring the reader to the second edition of my work, in which I have fully detailed my principles and method of treatment.

CASE 1.—J. A., æt. 47, a superintendent of a gas district, tall and well-proportioned; of delicate constitution. His father and mother, and uncle, died from consumption. He consulted me in January 1834. He was very thin, and stated that "he had lost almost all his flesh and strength, and feared he was past help." He had been ill with cough and shortness of breath

since the beginning of December, having caught cold from continued exposure to a N.E. wind. I found his pulse from 96 to 106, and feeble; the respiration was distressingly hurried by slight exertion; the animal heat was 101°. By auscultation, great obstruction to the breathing was shown, and the sound on percussion was dull, these indications being most remarkable on the right side. The sputum was greenish in appearance, not copious, and, examined by the optical experiment, did not present the prismatic colours; the tongue was morbidly red; the appetite impaired; the bowels prone to diarrhœa. He had sometimes two hectic paroxysms in the day, and always one; night perspiration was more or less abundant, and he never obtained comfortable sleep.

I directed the inhalation of a solution of iodine, with the addition of a saturated tincture of conium (for the formula see my 2nd edition), three times a day; the internal use of sarsaparilla and alkali twice in the day, and at night the acetate of morphia, with diluted sulphuric acid and sirup of tolu. The chest was washed night and morning with the lotion of purified pyroligneous acid, eau de Cologne, and water, used just tepid, followed by the use of the flesh-brush. The diet was nourishing and supporting.

The means of treatment agreed; but as I was convinced that the lungs were obstructed by tubercles which would soften, I viewed this as a case which, in the most favourable event that could happen, would become much aggravated before any convalescence could take place. In other words, he would get worse before he could get better.

From taking cold he lost his smell and taste, and suffered from a subacute attack of pleurisy, which was removed by blistering. He described that he felt very sensible relief from inhaling, and, together with the good effects on his chest, he was sensible of improvement of appetite from it. The intestinal canal had for some time been very irritable and often painful. He received benefit from a mixture of infusion of catechu with mucilage, tincture of kino, compound chalk powder, and Ford's laudanum (a saturated tincture of opium with the addition of spices). He took occasionally at bed-time, when there was evidence of vitiated biliary secretion, small doses of the *Hydr. c. Cret.*, joined with *c. Pulv. Ipecac. Compos.*

A journal of this case would occupy too much space: I shall content myself therefore with a brief general statement. At the middle of March it was evident, both by the general signs and by the local indications, that the expected softening process in the tubercles was advanced. He was thinner and weaker, and his ancles were swollen towards night; the expectoration was increased in quantity, more or less puriform, and often coloured with blood; the night sweats were usually profuse. In the right axilla I detected by the stethoscope a resonance approaching to pectoriloquism. The sound on the right side was dull to a great extent, and the breathing very imperfect. For the most part he maintained a tolerable appetite, but his appearance was altogether so unpromising that I almost despaired of any success. He persevered with inhaling. I changed the iodine for chlorine for a short time, but of his own accord he returned to the use of the iodine, judging from his feelings that it was by far the most useful. When the bowels became settled, I gave him the *Mistura Ferri Composita*, and changed it at the end of a fortnight for the mixture of sarsaparilla with alkali, or for one with quinine, according to circumstances. I directed some porter and a little sherry, with as substantial and nutritious food as his digestive powers would allow.

At the end of another fortnight pectoriloquism in the right axilla was unequivocal; the expectoration was abundant, and the sputum examined by the optical means gave prismatic colours. The respiration was improved; there was less of hectic fever in the day, and the night perspirations were abated.

From this period he improved, steadily pursuing all the means of treatment. Now, in the third week of November, he does not appear the same individual as when he first consulted me, so wonderfully is he recovered in flesh and strength, and his spirits are quite regained. He has scarcely any cough remaining, and his breathing is comfortable. The pulse is 76 to 80; the animal heat 98°. He has resumed his former occupation without inconvenience, and I have every expectation that with proper care on his own part, he will enjoy future health in a very comfortable degree.

Case II.—A gentleman, aged 26, of the middle height, muscular, of the mixed temperament, well formed in the chest, usually enjoying good health, with the exception of a liability to take cold and have a catarrhal cough in the winter season, caught cold from exposure for some hours on horseback to a north-east wind in March 1833. Inflammatory symptoms with pleuritic pain occurred, and general and local bleeding was used, with blistering, and an antiphlogistic treatment.

I saw him first in the beginning of June, and received the following account of his

case from Dr. Skrimshire, of Peterborough, in Northamptonshire. "This patient is the subject of recent but rapid tubercular phthisis." Then detailing the treatment which had been used, he adds, "I have not, however, at any time reduced the rapidity of pulse, or the urgency of the cough, for more than a day or two; the wasting has been progressive and rapid; and the expectoration, though never profuse, has for the last three weeks or a month been puriform."

I found the sound dull on percussion over a considerable extent of the left side; the respiration imperfect, and near the axilla the indication of pectoriloquism was sufficient to render it probable that a small cavity existed at the upper part of the lung. The signs on the right side were good. His breathing was much hurried on slight exertion. The cough was harassing; the morning expectoration was considerable, creamy, of disagreeable odour, and gave prismatic colours. He was suffering from slight pleurisy of the left side. He could not sleep without having the head much raised, nor lie well on either side. He had been more sensible of daily hectic fever, and night perspirations a month before, than at the period of my visit. The pulse ranged from 112 to 120; the animal heat was 101°. He had greatly lost flesh and strength, and his pale and hollow cheeks proclaimed at once the severe character of his disease. It was encouraging that his appetite was for the most part good, and that the digestive functions were not much disturbed, but the urine deposited lateritious sediment abundantly. So soon as I had removed the pleuritic pain by local treatment, I directed the inhalation of iodine with conium, and treated him altogether on the principles which I have detailed in the statement of my other cases.

This gentleman improved so regularly and favourably that he went into the country at the end of July, with the feelings of nearly restored health. He had gained flesh and strength, and was almost free from cough. The pulse was regularly under 80, and the animal heat was reduced to 97. He extolled the inhalation as the great source of his cure.

Since this period my patient has taken a journey of pleasure to Paris, and I have the satisfaction of hearing that he finds his strength and general health re-established.*

Case III.—A young gentleman, aged 22, tall, slight, with circular chest, of the nervous temperament, while labouring under great mental excitement, which was quickly followed by inflammation of the membranes of the brain, exposed himself, in a state of delirium, to the cold night air, when without clothes. Bronchitis followed. He lost blood from the arm and by leeches, and blisters were applied. It was observed that the severe symptoms affecting both the head and chest alternated remarkably. When I first visited the patient, he appeared pallid and exhausted, scarcely equal to the least conversation; and if any exciting topic was touched upon, he became delirious. The eyes were bloodshot; he could not bear light or noise; said that his nights were almost sleepless; that his brain often "seemed on fire;" and that his greatest comfort was to have his shaved head washed with the coldest water. He felt his chest bound as if with cords; the breathing was uneasy; cough was frequent and exhausting; the expectoration was in very large quantity, of highly puriform appearance, much coloured with blood, and of offensive odour. The pulse was from 120 to 130; the animal heat 102 degrees. Hectic fever was urgent, and on most nights the perspiration was excessive. The urine was of a dark colour, and deposited lateritious sediment in the greatest abundance. On the right side, over the upper part, the sound was dull; the voice gave much resonance to the stethoscope near the axilla. It seemed very probable that some ulceration had taken place. He was not at this time equal to the task of inhaling. I directed a blister to the chest; and the following mixture:

℞ *Potassæ Bicarbon.* gr. c. viii; *Succ. Limon.* ℥ij; *Mist. Amygd.* ℥iv; *Syrupi Tolutan.* ℥ij; *Acid. Hydrocyan.* ♏ x; *Guil. Nigr.* gtt. xv; *Potassæ Nitrat.* ℈ij. M.

Of this two tablespoonfuls were taken every four hours. He derived great relief from this medicine; but his sleep being still deficient, I directed the use of the morphine sirup at night, and its effects were most satisfactory.

He gradually improved in general health; but as the brain acquired a more healthy condition, the pulmonary symptoms became more urgent. The cough sometimes continued for an hour without ceasing; and the expectoration, which was uniformly more or less coloured, was, in quantity, upwards of a pint in each 24 hours.

I was resolved not to delay longer the trial of inhalation, and began with a small proportion of iodine, joined with my usual preparation of conium, the saturated tincture. At first he experienced great giddiness and sickness, and could only inhale for five minutes. He was in so weak

* Since writing the above, I have seen this gentleman, and find him quite well. His pulse is 66.

and nervous a state (hardly able to raise himself in bed) that he was timid, and alarmed at the idea of the new treatment. With better courage, however, he resumed it on the following day; and I was highly gratified to hear him, in a short time, express in glowing terms the delightful relief which he experienced from inhaling, which he said not only relieved his cough and breathing, but "calmed him all over." Many of the symptoms remained urgent for a week;—the quick pulse; the breathing easily hurried; the cough much excited by continued conversation; hectic fever at mid-day severe; perspiration at night excessive. But some appetite returned. There was more tranquillity of the nervous system, and much sleep was procured at night. Some decoction of bark had been added to the mixture. The bowels required regulation; and a pill with *Pilul. Aloes c. Myrrh.* and *Pulv. Jacob.* answered perfectly. In other cases I have mentioned the remarkable reduction in quantity, and alteration in quality, speedily produced in the sputum by the influence of the iodine inhalation; but I never witnessed this effect more strikingly produced than in the present instance. Within three days the quantity was lessened by one half, and it was much less coloured. At the end of a week it did not amount to more than four ounces, and in another ten days it was reduced to an ounce, with here and there only streaks of blood.

I am happy to add that the patient is advanced towards convalescence, and, I hope, may, with great care on his own part, be restored to health. He has gained flesh and strength, and has a good appetite. When he is in a state of perfect quietude the pulse is below 80, but is soon quickened by a little exertion. The animal heat is now only 98 degrees. He is in good spirits, and is confident of recovery, but he still has cough, with, sometimes, coloured expectoration; he has now and then copious night sweats; and after sitting up some hours his ankles become swollen. He continues to inhale regularly, and with unabated satisfaction. He uses the lotion for the chest, and the flesh-brush, with sensible benefit. He takes sulphate of quinine with sulphuric acid, &c., in the day, and the morphine sirup at night. He is quite free from hectic fever, and pursues a highly restorative diet with evident advantage.

Case iv.—A gentleman, aged twenty-four, of circular chest, of the mixed temperament, often wearing in his cheeks a colour like hectic flush, of a very consumptive family, was attacked with troublesome cough about four years ago. The expectoration was occasionally coloured with blood, and he found for the first time that his breathing became distressingly hurried by slight exertion. He had lost flesh and strength within a short period, and was much alarmed, as were also his friends, with the dread of pulmonary consumption, from which a brother and sister had died. The indications afforded by auscultation rendered it almost certain that his lungs were tuberculated, although not *en masse*. He inhaled iodine and conium with the greatest advantage; but being of an active disposition, and disliking confinement within doors, he went to Madeira, where he passed the winter and spring, two years in succession. The last winter he passed at Lisbon. During his residence at that place he caught cold, which was followed by cough, attended with coloured expectoration (which he described as a spitting of blood) every day for a month. He sent to London for an inhaler, the mixture of iodine, tincture of conium, and the internal medicines which I had prescribed for him on a former occasion.

He did not receive the articles till the expiration of a month. A medical friend in attendance upon him used his strongest persuasions to dissuade him from inhaling, under the circumstances of a troublesome cough attended with coloured expectoration, assuring him that in all probability a dangerous hemorrhage from the lungs would follow. He, however, fortified by his former experience, was resolved to adopt the treatment; and, accordingly, he inhaled the solution of iodine, with the addition of tincture of conium. He informs me that after the space of three days, the blood entirely disappeared; the cough was relieved, and in a short time he recovered his health.

Case v.—A young woman of delicate frame, and rather narrow chest, in the year 1825, suffered from cough and difficulty of breathing, for which she was bled twice from the arm, and blistered repeatedly.

In 1827 blisters were used; and she took digitalis with some advantage to the shortness of her breath, but with injury to her stomach and nerves.

During the two following winters blisters were applied.

In 1830 I was consulted, when she was suffering from very troublesome cough, short breathing, a sense of tightness and of soreness in the chest, without any fever. Her breathing was like that of an asthmatic person, and always became distressed under the least exposure to a

foggy atmosphere. She was getting thin and weak, and she had also a consumptive look.

I directed the inhalation of iodine and conium, in conjunction with the washing and friction of the chest; and no other treatment was employed. Suffice it to say, that she recovered in the most favourable manner.

Capt. Kater, in whose service the patient lived, informs me, that since the period of my attendance she has but rarely been affected with her complaint; and has, on each occasion, obtained relief in a few days from having recourse to the inhalation.

I could multiply examples equally in favour of the value of inhalation of iodine and conium, as those which I have stated; but I have no right to trespass further on your pages; and I trust that I have offered sufficient proof to satisfy every candid reader.

I will take the opportunity of mentioning that the patients whose cases of confirmed tubercular phthisis, with ulcerated cavities, are detailed in the additional part of my second edition, at p. 138, c. i; p. 184, c. ix; p. 194, c. xi; all continue to enjoy their recovered health, bearing the most happy testimony * to the benefits derived by them from inhalation and the collateral treatment.

It is my earnest recommendation to the profession to give a fair trial to the practice, and to use due *perseverance*, to which principle of acting I owe so much of my success. I am certain that inhalation is often abandoned too hastily, and for very insufficient reasons.

Nor should any one allow himself to think slightly of the method of treatment because in many cases it will not succeed. No human means can avail in the worst cases of pulmonary consumption; but it is my sincere conviction that the best chance would be afforded to the patient by the adoption of the particular and general plan which I have laid down; and, certainly, it will be found to render the comfort of largely mitigating the symptoms, even when the force of disease is too aggravated to admit of cure.

* The several patients who have recovered have expressed their desire that I should refer to them any consumptive invalids, or their friends, who might wish to be assured upon the advantages of the inhaling treatment.

MERCURIAL INUNCTION IN ERYSIPELAS.

To the Editor of THE LANCET.

SIR,—The pages of THE LANCET for the year 1832, No. 463, afforded me an opportunity of advocating the employment of the mercurial ointment in erysipelas. I am happy to observe that the attention of the profession has, since that period, directed itself with success to the adoption of a remedy which has proved itself as useful as it is simple in its nature: and, it is with much satisfaction I perceive that your very valuable journal has been instrumental in procuring its adoption by eminent practitioners in the sister countries.

The opportunities afforded me of witnessing the disease in question, since the above-mentioned year, have not been few; and the facts they have exhibited may not be uninteresting to the medical world, or, at all events, may lead some of its members, who are favoured with ample opportunities of encountering this troublesome malady, to investigate the circumstances more closely than other engagements have allowed me to do. A statement of individual cases would trespass too much upon your columns, to the exclusion of matter equally important. To avoid such injustice, I will, therefore, concentrate in a brief account those guiding principles which have fallen under my observation.

In a simple case of *idiopathic* erysipelas, when seen before the formation of vesicles, the constitution not being impaired by excesses of any kind, I have seldom found it necessary to employ any other remedy than the *Ung. Hydr. Fort.*, paying attention to the state of the bowels and enjoining low diet. I cannot recollect ever being necessitated to make use of more than five applications, and frequently not more than two or three were required; in these cases I did not find that the mercury at all affected the mouth. When, however, the patient (as is but too frequently the case in erysipelas) had weakened his constitution by intemperance, and there was much disposition to œdematous effusion; or when any other cause had abstracted a portion of that power which the body possesses of resisting disease; *then*, where stimuli were indicated, a perseverance in the use of the same remedy has indeed shown its most decided advantages, exhibiting a striking influence over the progress of the disease, and preventing its extending to internal and more important structures. In such cases, I have almost invariably found the mouth

become affected, while the decline of the symptoms has, in a marked manner, followed the appearance of ptyalism. From mercury in no other form have I met with the success which has resulted from the application of the *Ung. Hydr. Fort.* The other preparations of the same metal were either discontinued from their too stimulating nature, or have seemed to be ineffectual in arresting the progress of the malady. Perhaps, however, I might suggest that were the case to have proceeded to such extent as to show a tendency to gangrene, the *Linimentum Hydrargyri* of the Pharmacopœia would, by its combination of mercury and camphor, be a preparation advantageously adapted to the case.

Unless the ointment be applied *immediately to the part affected*, I have not observed any beneficial results from its employment, and in some cases where, for experiment sake, I ordered friction with the mercurial ointment to the groin, for erysipelas on the leg, it was not only of no service in arresting the disease, but the latter went on increasing under the treatment. As a rule, with respect to the *temperature* practised towards the affected part, it will be as well to mention that the ordinary atmospheric standard has invariably been better suited to the cases that have occurred within my view. About a month since, I had an opportunity of observing, in a very pointed manner, the good effect of this remedy. It was in the case of an ill-nourished, attenuated, pauper female, who had been a frequent subject of erysipelas: in this case, it made its appearance on the right thigh, and was rapidly extending. I had the satisfaction of arresting its progress by the mercurial ointment alone, for no other remedies were employed but a cretaceous mixture to remove an accompanying diarrhœa: under different plans of treatment she acknowledged that her illnesses lasted, and with far greater severity, for a much longer time than the period (a few days) she remained under my care.

Such are the gleanings I have to offer to the notice of my fellow brethren, and to their judicious conduct I leave the power which experience has taught me the mercurial ointment possesses to alleviate suffering, and palliate one of the most inveterate diseases to which humanity is liable.

I am, Sir,
Your most obedient servant,
ADOLPHUS TAYLOR, M.R.C.S.L.
Tower, Dec. 6, 1834.

DR. BLUNDELL'S THIRD LETTER
TO HIS
MEDICAL FRIENDS.

GENTLEMEN,—A second letter having issued under the signature of my late assistant, in which he engages to verify the assertions contained in his first, by evidence taken from my own letters, I think it but due respect to the opinion of my friends to point out, paragraph by paragraph, the fallacies which it contains. As in doing this I shall frequently be under the necessity of alluding to both his letters, perhaps those who do me the honour of a perusal will take the trouble of keeping these two documents continually open before them.

The first of these statements of the writer was not, as misquoted in his second letter (LANCET, p. 259), that in 1829-30 he "was requested by Dr. Blundell to give clinical instruction to his pupils," but that "in 1829-30, *in consequence of new arrangements which then took place, he was" so requested.* (LANCET, p. 78.) This I again assert is not true. In consequence of the new arrangements, Mr. Doubleday, as stated in my first letter, was solely engaged to undertake the important task of giving clinical instructions to the whole class throughout, which he did with vigour and effect, and the writer of the letter was merely one of the Consulting Surgeon-Accoucheurs to a small portion of the general district; this too by his own wish, and not at my request, as the other five gentlemen were. So that to assert that in consequence of new arrangements, and by my request, he at this time was appointed to give clinical instructions is untrue; there were in this matter, touching him, no new arrangements; no request was made, and no such appointment took place.

Thdly. It was not asserted by Dr. Blundell that the writer was disqualified for the important duty assigned to Mr. Doubleday, because he was engaged in giving assistance to the rival class "*of Messrs. Grainger and Pilcher*" in Webb-street. Had this been the case, there would have been more fitness in the decisive answer of Mr. Pilcher. My words were (see 2nd letter, LANCET, p. 207) "engaged in giving assistance to the rival class in Webb-street,"—viz. the obstetric class—not the class of Messrs. Grainger and Pilcher, who were the *anatomical* and not the *obstetric* teachers in that school, a fact which necessarily weakens the force of Mr. P.'s evidence in the matter. Now Mr. Pilcher, on whose honour I have a full reliance, has authorized me to state, that although he

does not himself believe that the writer gave assistance in more than two cases, in which he would have been wanting in humanity had he failed to act when called upon; yet that he Mr. P. is not prepared to assert that he must of necessity have known of all the cases in which such assistance was given. The truth is, and I had the statement so as to produce a full impression on my mind that occasional help was afforded by the writer to the pupils of that school, in cases of difficult delivery, in more than one or two instances, and that the practice was likely to be continued; nor had I the least right to complain of this, though in prudence I deemed it fitting to engage, for the purposes abovementioned, an accurate and active friend, equally able, and I believe wholly unconnected with the rival class in the neighbourhood. That I might be deceived in this impression as to the extent of the services rendered is very possible; Mr. Pilcher's letter goes some way to render it probable; but I received the information in my own study, under circumstances that fixed it indelibly in my memory, from a gentleman on whose testimony as well as opportunities of knowing I thought that I might safely place reliance, viz., the writer of the letter himself. If the commemorative circumstances are called for, I am ready to state them confidentially to any honourable friend.

3rdly. The second statement of the writer was not merely, as he misquotes, that "when the extension and improvement in the obstetric department at Guy's Hospital occurred, his predecessor wrote to him, and requested him to officiate as his obstetric assistant" (see his second letter, LANCET, p. 259), but something more than this; "I received a communication from Dr. Blundell, requesting, that as his *duties were increased, and his health uncertain*, I would officiate as his obstetric assistant;" a clause which clearly declares, by implication, that my health being reduced, and my labours too oppressive, I was made to look forth for assistance, and stretched out my hands to the writer; all which the writer engages to prove, by my own letters; observe, by my own letters.

To feel the untruth of this declaration, and the total downbreak of the evidence, it is only necessary to be acquainted with that which seems to be too often wanting in the statements of the writer, viz., "the truth, the whole truth—and nothing but the truth;" and which, as he has placed himself at the bar of public opinion, in legal formulary, we have a right to demand. "My silence," he says, "under such imputations might be mistaken for a consciousness, perhaps, for an admission of guilt. I must therefore verify my own assertions, and the verification shall rest upon the best of all testimony, that of *the Doctor's own letters*." The entire, though brief account of the transaction, is this—and see how opinions change when we look upon both sides of the shield.

Towards the close of the summer of 1831, when I was neither thinking nor dreaming of the writer as my assistant, passing near the great steps of the Hospital, my attention was drawn to one of the Guy's papers (as I was then told unpublished, though printed) exhibiting upon its face the name of the writer as my assistant; and I was asked whether I would consent to the appointment. At this time little in the way of decision was said; but it having been further intimated to me that the old gentleman at the head of affairs, the treasurer of the hospital, was desirous to communicate with me respecting the matter, I had a conversation in his office, in which I intimated the risk of schism, insisted upon retaining the clinical lectures, and showed a disinclination for the proposed alliance, with a disposition however to give way; at last the good man and myself parted, with this memorable exclamation upon his part,—"The out-door patients Mr. A. *must* attend," emphatically "MUST." On returning to George-street, I found it was now time to decide whether I would surrender to the wishes of the hospital, or tender my resignation, for I had enough of the gift of second sight to penetrate a little into futurity here. Before, however, I could come to a determination, it was necessary that I should hear the terms to which my proposed assistant would accede; and in this view, on the 31st of August 1831, I addressed to him the following note:—

"1, Great George-street, Westminster.

"My Dear Sir,—Will you inform me, per bearer, whether you can give me a call this morning, at one p.m., as I wish to communicate with you on a subject IN WHICH YOU take an interest. I am, dear sir, yours faithfully,

"JAMES BLUNDELL."

The interview took place, and the result I furnish my readers, in the duplicate of a paper now in my late assistant's possession, the terms of which were dictated by myself.

"Lime-street Square, Aug 31, 1831.

"My Dear Sir.—The impression on my mind, from our conversation this morning relative to Guy's Hospital, leads to the following conclusions:—

1st. That my being admitted to perform certain of the duties attached to the clinical obstetric instruction, gives me no claim to the midwifery chair, so long as you choose to occupy it.

2nd. That I am to be recognised as your assistant in the above department, you, of course, taking the lead.

These matters, my dear sir, are the

formal basis of the arrangement; and allow me to assure you that not only in the letter, but in the spirit of them, I fully concur.—I am, my dear sir, yours faithfully,

"SAMUEL ASHWELL."

"To Dr. Blundell."

This note having been written and delivered to me, I thought it right to acquiesce in his appointment. And now having given the whole of the transaction from first to last,—having shown by the above statement, that request from me was totally out of the question—that solicitation came from the other party, and that it was my office to define, not to receive, terms of admission, let me ask how is the contrary proved? How is it made to appear, from these notes or otherwise, that I requested an assistant? How is it made to appear, from these letters or otherwise, that I pleaded ill-health; and that, in consequence of this, or of any circumstances whatsoever, I requested this gentleman, above all others, to officiate? Dr. Blundell wrote? Dr. Blundell expressed a wish? a wish for what—that the proposed assistant would listen to his complaints about ill-health? That he would graciously bend a favourable ear to his petition for assistance? No such thing. The note merely expresses a wish to communicate on a subject in which the *proposed assistant* took an interest. And what was this subject? Why the proposal that was come from that gentleman's friends; the request, not to say the something more than request, on the part of the treasurer that Dr. Blundell would accede to the appointment; the desire to know distinctly and in writing, without evasion or cavil, the terms to which the proposed assistant would bind himself, *in letter and in spirit*, on condition of obtaining the first and therefore the most important step of his promotion. These were the subjects on which I desired to communicate, and these only; to these subjects, and to no other, does the term "wish" cited from my letter, and blazoned forth in italics, apply.

Availing themselves of the light which is here brought to bear on the transaction, let my readers do me the favour again to peruse the letters, and then judging impartially, as between man and man, let them decide whether *from those letters*, as promised, the writer has made good his words, viz. that I requested him to officiate as my assistant. For my part, I see no help for the matter, unless indeed we have recourse to the elastic principle of my Lord Peter in the affair of the testament and the shoulderknots, when "he who found the former evasions took heart, and said, 'Brothers, there is yet hope,'" for though we cannot find them *totidem verbis*, nor *totidem syllabis*, I dare engage to make them out *tertio modo*, or *totidem literis*. But to drop all jest, the plain truth is, the writer has not been able to prove his point *in any way*, much less from the letters; and for this obvious reason, that such was not the fact. Nor is this a question of small importance. Solicitation for an assistant is one thing; the obtrusion of an assistant is another: the one is an indication of a cordial desire of union; the other, as every one acquainted with an hospital knows, may signify a desire to displace. The distinction is not verbal only but real, and touches the very heart of the business.

4thly. When it was that the writer of the letter was *personally* introduced to the treasurer, that introduction never having been given by me, I am even at this moment ignorant. All that it is necessary for me to know respecting the matter is, that as a gentleman fitted for the good man's purpose, he had been by character and recommendation effectually introduced before the preceding transaction took place, as indeed the above narration itself clearly shows. The writer, however, seems to have left his readers at liberty to conclude that his personal introduction to the treasurer came from me; perhaps this is accidental; but if designed it certainly evinces an acquaintance with the pleader's art, for had the introduction come from me, this of course would have strengthened his former assertion, that it was Dr. Blundell who solicited his appointment. So far, however, was this from being the case, that one morning a gentleman of the hospital, whom it is unnecessary here to name, but whose name I am ready with his assent to communicate to any common friend, called in George Street for the express purpose of saying, "Dr. Blundell, I have just been told that you say that I introduced Mr. A. to the Treasurer," or words to that effect. "Now remember"—I remember the words as well as the notes of a favourite air—"Whatever comes of it, it was not *I* that introduced him;" an address which clearly shows what was supposed to be the *animus* in operation within those political walls. Was this being introduced to the Treasurer at the *solicitation* of Dr. Blundell? Was this being introduced to the Treasurer in the way that Dr. Blundell was by his predecessor?

5thly. The fourth statement of the writer was, not as he again misquotes in his second letter, (LANCET, p. 260,) "I gave the clinical lectures for two or three seasons," but, "I gave the clinical lectures for two or three seasons—having been solicited to do all this by Dr. Blundell himself" (see his first letter, LANCET, p. 78). And here is his proof: My first clinical lecture, he says, was delivered in the Medical Theatre of Guy's Hospital at the latter end of the session 1832—3, and my letter which

he adduces proves that this was after the 13th of April 1833.—Now since the 4th of June 1834, I have had no more professional connexion with Guy's Hospital than with the hospitals and clinical lectures of Paris or New York; my advertisement was refused; a spurious document was substituted; the old gentleman at the head of affairs knowingly and contumaciously retained the bastard paper upon the board; and from that time to this, within the walls of a place where such an insolent indignity was attempted, my foot has never been set. As therefore the writer's lectures, at my solicitation, under my authority, and as my assistant ended with the 4th of June 1834, and began at earliest with the middle of April 1833, and as the season ends with May every year, it is so clear, if he speak of seasons, (and of seasons alone he does speak in his letter,) that he lectured during the last season only,* and that small portion of the preceding which extends from the middle of April to the middle of May 1833; that unless one season and four or five weeks of another are equivalent in time to two or three seasons, the assertion becomes convicted, not only of an untruth, but of an absurdity as great as,

1 season + ⅓ of a season = 3 seasons; or,
1 season + ½ of a season = 2 seasons.

Or put the absurdity in another form. The writer on my account lectured 37 or 38 weeks exclusive of the vacation weeks, which do not belong to the "season." Then, unless 37 or 38 weeks are equal to 98 weeks, he did not lecture three seasons; for three seasons are equal to 98 weeks; and unless 37 or 38 weeks are equal to 65 weeks, he did not lecture even two seasons, for two seasons are equal to 65 weeks.

But he will say perhaps that, though he speaks of "seasons," he means to include the vacation. Be it so. Then, unless 59 or 60 weeks † are equal to 156 weeks ‡, he did not lecture three seasons including vacations, and unless 59 or 60 weeks are equal to 104 weeks, he did not lecture even two seasons including vacation. Put it which way you will, the absurdity always remains the same, viz. 1+a small fractional part of 1=3, or that 1+ a small fractional part of 1=2.

What then does the writer mean by stating that he gave the clinical lectures during *two* or *three* seasons? that he gave them during two or three seasons *at the solicitation of Dr. Blundell?*

6thly. The next statement of the writer, but which did not appear in his former letter, is, "that since 1831, when the clinical obstetric teaching commenced, my predecessor may have given eight or ten such (clinical) lectures, I have delivered at least 70."—(LANCET, p. 270.) The dates in this statement will be the better for a slight correction; they should stand thus: "Since 1831 my predecessor may have delivered eight or ten such (clinical) lectures, but *since April* 1833 I have delivered at least 70." The correction is not without its importance, as will hereafter appear.

Now before this vaunted course of 70 lectures can be honestly set by the side of the eight or ten clinical lectures said to have been delivered by the writer's predecessor, after the preceding specimens of untenable and indeed absurd exaggeration, the reader will not be surprised to hear that from this number 70 a very large deduction must be made. And first, as these lectures continued through the summer vacation of 1834, for he tells us, "I continued to lecture clinically during the present summer (1834);" from the number of 70 at least one-fifth must be deducted for lectures given after my connexion with the hospital had entirely ceased, —in other words, after the 4th of June 1834; for as the whole period of the lecturing extends from April (1833) at earliest, to the close of September in the subsequent year (1834), that is, over a period of seventeen months and a half, those four months of this term during which I had no connexion with the hospital, and of course was in no way responsible for the lectures, viz. from June 1834 to September inclusive, constitute *more* than one-fifth of the whole. From these lectures, then, set off on this account 14, *i.e.*, one-fifth of the 70, a very moderate deduction, and the number shrinks immediately to 56.

But again, even from this reduced number of 56 lectures, it will immediately appear that a further and much larger deduction must be made, as the following calculation will show. The clinical course of the writer may be divided into two parts. The first, comprising those lectures which might be grounded on the ward cases; the second, those which might be grounded on the out-door cases. Of the ward cases, on an average the number was about ten; of the out-door cases, the average so far as I am able to learn was at least sixty. Now, from the nature of clinical lectures, their number must in the main be in proportion to the number of cases actually under care; and

* The season always begins 1st of October and ends 15th of May, or thereabouts. The portion of the end of the third season during which the assistant lectured, began at earliest 13th of April 1833, and ended 15th of May 1833. His lectures from 15th of May to 4th of June, 1834, are excluded from this calculation, because they do not belong to the season but to the recess, and it is of "*seasons*" that he speaks; but the absurdity would be as great if they were thrown in to him as a God-send.

† For, including vacations, 59 or 60 is the number of weeks that he lectured altogether.

‡ For three seasons, with their vacations, are equal to 156 weeks. Two, with their vacations, are of course equal to 104 weeks.

therefore the lectures on the ward cases may be set down at 1-7th, and those of the out-door cases at 6-7ths of the whole. From this it follows that of the fifty-six lectures which remain after the former deduction, 8, that is 1-7th, may be fairly referred to the ward cases; and 48, that is, 6-7ths to the out-door department. Now as the Treasurer's "MUSE," had from the first entirely removed me from the out-door department, and its lectures; from the whole number of fifty-six lectures, for which I am absurdly made responsible, let us deduct those forty-eight with which I had no concern, and the total immediately shrinks to eight, as the entire number for which I remain accountable.

Lastly. This course of eight lectures must further be divided into two parts, that which belonged to the vacation of 1833, from May to October, a period of something more than four months;* and that which belonged to the session of 1833-4, a period of about eight months, for the writer tells us that he lectured through the sessions and summer vacations. Now as the session in round numbers constitutes 2-3rds of the whole period, and the vacation 1-3rd, to the session we may fairly assign 2-3rds of these lectures, say 5 or 6, and to the vacation 2 or 3; and thus, when subjected to the cold hand of arithmetic, this magnificent number of seventy lectures, for which Dr. Blundell is made responsible, suddenly drops from seventy to fifty-six, from fifty-six to eight, and ultimately settles down as low as four or five lectures for a session, a number which it will be observed exactly corresponds with that which I delivered myself, eight or ten in the course of two sessions, in other words, four or five in each.†

But should this calculation displease, there is another way of viewing this matter, which perhaps, with some, including my late assistant himself, may be more convincing and intelligible.

The clinical wards of the practice of medicine, which I need not observe is the leading subject in a medical school, contained altogether 19 female beds and 24 male beds, thus furnishing 43 cases, for the beds are generally kept full. Now, in the course of a session the clinical lectures delivered by Drs. Cholmeley, Bright, and Addison, taking two months each, according to my best information, amounted altogether, on an average, to between twenty-five and thirty,* viz. one lecture per week during six months, rather more, however, than less. Now, as their beds, forty-five in number, were more than three times as numerous as my own, ten or twelve in number, unless we suppose that all those gentlemen were slack in their clinical exertions; twenty five divided by three will bring us near the proportion which the ten or twelve cases required from me, that number will be 8, (8 and a fraction,)† that is, three or four more than I am said to have actually delivered in each session. But for this smallness in the number of the clinical lectures, I was accustomed to compensate, first, by the copiousness of my information by the bed-side; and, secondly, by throwing the spirit of the clinical information into the obstetric lectures, one of which I delivered every morning. In doing this, besides considering my own repose, I remembered that obstetrics constituted, though an important, yet a secondary subject, in a medical school; that the time of the pupils was fully occupied; and that to cram them was one thing, and to instruct them was another; and it is evident, if from twenty-five to thirty clinical lectures annually were sufficient in medicine, from forty to fifty clinical lectures‡ in obstetrics must have been more than sufficient. Were none of them given as an exercise in extemporaneous declamation? Is there not a current report that at some of these lectures the class assembled scarcely exceed some *three* or *four* persons? Have not the wags added, *apprentices* included? But, perhaps it may be said that, whatever we may think of the judgment of the writer, his activity, at least, greatly exceeds that of Dr. Blundell. Seventy lectures on the one hand, eight or ten on the other. Not so, however; during the period that the writer gave this vaunted number of seventy lectures, Dr. Blundell, who lectured six mornings in the week, was in the habit of giving, at least, five times seventy, exclusive of two lectures delivered weekly during the session, on physiological subjects.

To conclude then, instead of the exposition of facts neutralising my statement, and proving it to be "incorrect and unguarded," as the writer has asserted, it confirms that statement in every particular, as the following citation of it will clearly prove: "It is not true that during the first two years of the clinical establishment, the delivery of the clinical lectures was by Dr. Blundell's solicitation committed to the writer of the letter;" on the con-

* The more exact period of the vacation is four months and a half, that of the session seven months and a half. I have taken them in round numbers.

† During the summer vacation clinical lectures were not expected, the hospital being very empty, and the necessary information easily communicated at the bedside.

* Now and then an additional lecture was delivered on Saturday. Five are here thrown in for this.

† $30 + 3\frac{1}{2} = 60 + 7 = 8\frac{1}{2}$

‡ Seventy lectures in seventeen or eighteen months give from forty to fifty lectures per annum.

trary, "during those two sessions the lectures, agreeably to an arrangement made with the treasurer, were given by myself (Dr. B.); and, in consequence of this arrangement, the writer did not lecture *at all* till the close of the second out of three sessions, viz. April 1833, the session terminating very soon after, viz. in the middle of May; and even then he lectured unsolicited, and without my (Dr. B.'s) being informed of it for some time afterwards."* And is not all this true? Why, good heavens! the writer himself has furnished the data which prove it; the data which prove that he began to lecture in April 1833, indeed after the 13th; the data which prove that he began lecturing unsolicited; the data which prove further, even according to his own showing, that he was not asked to lecture at all, till many months after he had begun lecturing of his own accord. How could the writer then have the conscience to assert that he had given the clinical lectures during *two* or *three* seasons? "That he had given the clinical lectures during *two or three seasons at the solicitation of Dr. Blundell himself?*" How could he have the conscience to assert this, when it is clear, with respect to seasons, that he lectured *one only* and the *fag end* of another; and when he is now under the humiliating necessity of acknowledging, that it was not till the beginning of the last of the three seasons that he was in any shape asked to lecture at all?

Sthly. With respect to the writer's fifth statement. In the first place, he is wrong in representing this statement to have been merely that he "saw and treated nearly all the cases in the female ward; and that he had the entire charge of the Hospital charity, and of the obstetric out-patients," as a correct citation of the misquoted passage will prove; for he has suppressed a most important clause in his original charge, viz. *that he was solicited to do all this by Dr. Blundell himself.* See the writer's first letter, "HAVING BEEN SOLICITED TO DO ALL THIS BY Dr. BLUNDELL HIMSELF." (LANCET, p. 78.) Now as *one* main object of the letter was to prove that he was not a nominee or protégé of the Treasurer (see his first letter, LANCET, p. 78), and as it would have told much in strengthening his assertion, if it could have been shown that in this, as on other occasions, he had been solicited by me as asserted, he ought either to have made good his words with respect to this solicitation as an important part of his defence, or to have given an honourable retractation; and surely, in any case, he ought not to have suppressed the clause which, whether intentionally or from carelessness, he has very improperly done.

Further, the writer tells us that he saw and treated nearly all the cases in the female ward, and that he will prove this by my letters; and after citing two notes, he comes to the monstrous conclusion, that at my solicitation "during the thirty-eight months that it (the ward) has been open for the reception of patients," Dr. B. his "predecessor has been in attendance *twelve*, and" the writer "twenty-six months." And here, not invidiously, but with a view of doing justice, and setting the reckless inaccuracy of my late assistant in that light which truth requires, I request the particular attention of those who honour me with their perusal. On my account, as he clearly intimates in his *second* letter, and at my solicitation, as he distinctly declares in his *first*, he says, he attended these wards; and it is clear, on reading his statement, that he makes me accountable for *eight-and-thirty* months, during which the wards have been opened; for he brings it as a charge, that while Dr. Blundell attended during only twelve months of this period, the writer was in attendance twenty-six. Now in the beginning of last June, 1834, my professional connexion with the hospital entirely ceased, as already distinctly stated. According to his own showing, the wards were first committed to my care in the end of September 1831, rather later than earlier; therefore the whole period during which the wards were open to my attendance, instead of being THIRTY-EIGHT MONTHS, was only THIRTY-TWO, or at the most THIRTY-THREE MONTHS. How is it then that he makes out against me a charge for THIRTY-EIGHT MONTHS? why, by actually setting down to my account a period of FIVE months (from June to November), throughout which I have had no more to do with the clinical and other establishments of Guy's Hospital, than with those of the Hotel Dieu. Gracious Heaven! what are we to think of all this? Is it intentional, or is it a most thoughtless and reckless inaccuracy?

The figures of the writer being clearly incorrect, I will now endeavour to state according to his own data, what the respective periods of attendance really were. From the end of September 1831, or thereabouts, when the wards were first committed to my care, to June 4, 1834, is a period of *two-and-thirty months*; this being the whole period during which the clinical establishment was under my direction, and during which it was my duty, or indeed my right, to enter the wards. Now, my attendance during the first session was at least from the beginning of October 1831 to the end of May 1832. (See the date of the letter in which I resigned the ward to my assistant, May 31, 1832, LANCET, p. 260.) Here is a period not of *six* months merely, as stated by the writer with his usual injustice and inaccu-

* See Dr. Blundell's second letter, LANCET.

racy, but of *eight*. Further, my second attendance on the wards began, not in *November* or *December*, as again incorrectly and unfairly stated by my assistant, but in the *first* week of *October* 1832, and ended April 13, 1833, (see the date of my second letter, here again is a period of more than *six* months, instead of *four and a half*; thus it appears that of *thirty-two* months, during which Dr. Blundell was the director, he was in attendance more than *fourteen* months, these being the active and laborious period of the session, and the writer was in attendance, not *twenty-six* months, as he states, but something less than *eighteen*, and of these *eighteen* months, *eight* or *nine* months were *vacation*, when there is a recess at the hospital, and when of course both the professors and pupils are expected to recruit for the session. Thus the writer's statements of our respective labours are as true as that *eighteen months* are equal to *twenty-six months*; or that *fourteen* months are equal to *twelve*. Or, to put the fact in another form, of *twenty-two or twenty-three* SESSIONAL months that the clinical wards have been open under my direction I have been in attendance *fourteen* months, and my assistant between *eight* and *nine*.

9thly. And here again I entreat, in justice the special notice of the reader, though aware that to discover and rectify these erroneous representations must be as wearisome to him as to me. After making a preceding statement which is full of errors, declaring me answerable for the wards during five months that I have had no connexion with the hospital; asserting that I began clinical attendance in December 1832, when in reality it was *two* months earlier; informing his readers, that having resigned the wards on the 13th of April 1833, and begun my attendance in November or December preceding, that is towards the end of November 1832; I had been in attendance *six* months, though the whole period is not more than *four and a half*; after giving under his fifth head of reply a statement which as shown above suppressed or omitted one of the most important clauses of the original which he undertook to defend; after in a word skipping from error to error with the recklessness and levity of the bird upon the bough; the writer takes his stand in the middle of this *gaché* and asks triumphantly "What must be thought of Dr. Blundell's startling assertion that these wards were with a few occasional interruptions regularly attended by himself, and not at his solicitation" by the author of this letter? Why after all that has gone before, it is obvious enough what will be thought—not that Dr. Blundell has asserted that which is not true, but that the writer has had recourse to a misrepresentation, as will immediately appear on consulting the original; and here it is word for word.

"*It is not true* as insinuated, that during the *two first* of the three sessions, through which the clinical establishment had subsisted, the main burden of the ward fell, at *Dr.* Blundell's solicitation, on the writer of the letter; on the contrary, with a few occasional interruptions, these wards were regularly attended by Dr. Blundell himself."*

And is not all this literally true? Did not Dr. Blundell, after the wards were put under his care, attend during the whole of the first session ending May 1832, and indeed beyond it? Did he not further attend during almost the whole of the second session ending May 1833, with a slight interruption of *four or five weeks only* in the end of the session, and this occasioned by ill health? Why, the letters and their dates, instead of confuting the assertion, confirm it with a minuteness of accuracy which, when contrasted with the random assertions of the writer, will, I am persuaded, strengthen the confidence of the reader in all the rest of my statements.

And now the public having been enabled to see and feel the errors, perverasions, misquotations, not to add arithmetical absurdities, which riddle and dilapidate this vaunted defence, is the writer prepared to fall back upon it and repeat "that he is quite willing to abide the verdict of the professional public as to the veracity of his statements?"

With respect to the nature of the obstetric interest at Guy's, I have to remark, that notwithstanding the assertion made to the contrary, it was decidedly *private property*. It had existed for years *extra mœnia*, before the medical school of Guy's was in being; it was illustrated by the lecturer's private museum; for some time after the class was introduced into the hospital, the janitor of the theatre was the lecturer's own private servant,—the entries were made and the subscriptions were received at first, and for a very considerable period, by the lecturer's own hand, accountable to none, and afterwards, permission having first been asked, they were deposited with a very worthy man, the apothecary of the hospital, who received commission, rendered his account, and was therefore the agent of the teacher; money was paid by the lecturer to the hospital for certain accommodations; the teacher had a right (restrained only by his own sense of propriety) to advertise

* On reading this paragraph, it will be seen at once that I am asserting the regularity of my attendance during the two first of the three sessions; the writer, however, omits the first part of the passage, that which fixes the time of the regular attendance, and thus of course takes out the true meaning from what follows. Thus the disputant in the story, to prove the non-existence of a Great First Cause, quoted a *part* of the text *only*, omitting the preface "The fool hath said in his heart."

when and where he pleased, nor, had he deemed it fitting to quit the hospital, taking his class and his museum along with him was there any legal impediment to bar. Gradual encroachments there were; the apothecary of the hospital, as stated, was proposed as the receiver of a part of the subscriptions; the treasurer asked and obtained permission to hold the fees; within the last year or two it was bruited that he had begun officiously to give his opinion as to when the course had better commence, and ultimately with an audaciousness of impertinence which has been most deservedly withstood and rebuked, he took that monstrous liberty with the name of a gentleman every way his equal, which has excited the disdain of which complaint is now made. All this, however, made no change in the original nature of the property, and surely, unless this statement can be disproved, he must be a very indifferent jurist, and not over delicate in his perceptions of right and wrong, who could lay hold of such a property as if it had belonged to the Hospital.

To this, however, it is urged, that the chair belonged to the Hospital, and that "such was formerly Dr. Blundell's own opinion;" in proof of which we have, as usual, a misrepresentation, as the reader no doubt by this time will be fully prepared to expect. The clause so triumphantly extracted from the draft, as every lawyer probably will see at the first glance, did not come from Dr. Blundell or Dr. Blundell's solicitor, but from the writer and the writer's solicitor; and shows not Dr. B.'s opinion, but the caution of the other party. As Dr. B.'s title was in no way impeached, his solicitor merely assented. In fact the connexion between the Hospital and the Lecturer seems to have partaken much of the nature of that subsisting between landlord and tenant.

With respect to the unworthy charge of sordid motives with which the parties have endeavoured to asperse their opponent, the profound historian of antiquity in one far-reaching apophthegm has at once enabled us to account for so groundless an imputation, and at the same time, in a great measure, secured us against the impression which it was intended to produce, "Proprium est humani generis odiase quem læseris." To hate the man you have injured is the peculiar instinct of our nature. But as the issue of the whole transaction is to leave to my good friend at the hospital the presentation to the chair and its emoluments within the walls, and to place Dr. Blundell without the walls, divested of much of his interest, and without a single drachma of compensation, if there be rapacity in the transaction, it is evident enough on which side it lies. Could Dr. Blundell have been moved by pecuniary motives, a sort of bribe was not wanting, for if he would have bowed his neck to his good friend at the hospital, "the chair was still open," and his servility would have been rewarded by *a readmission to his own*—as the ward in the well-known comedy was to be munificently repaid for her complaisance to the alderman by the sparkling gift of a portion of her own fortune. But this matter may be disposed of in a few words, in a way which my friends and the public will readily understand. If a clergyman were driven from his benefice by intimidation, were the authors of the wrong to take the presentation into their own hands, in consequence of his retreat, who would deny that a great injury had been inflicted? In like manner, if a professor be impelled to leave the chair in consequence of the attempted indignities to which he is unworthily subjected, who can doubt that the authors of the procedure, in availing themselves of their misconduct to seize the presentation, are guilty of an injustice too? The fact is, if the truth must be told, that, besides the grave indignity that was attempted, Dr. Blundell, as hinted in his first letter, sustained a serious injury; and to throw the aggressors into the wrong, Dr. B. demanded compensation for that injury; *not as the reward of silence*, but as *a matter of right*, well knowing, at the same time, that he should obtain nothing. And here I may observe, by the way, that in this part of the transaction one circumstance occurred which was truly comic, and would, I think, on the stage, produce an admirable scenic effect. After the parties, by whatever means, came into possession of the chair and its emoluments, without compensation, the old gentleman at the head of affairs actually requested that a paltry balance might be allowed still to lie in his hands to meet minute contingencies! And is it for these men to talk of the love of money? And is this the individual who wants to set his foot upon the neck of the graduatesof an honourable and salutary profession? Oh, spirit of Hogarth!* Oh, mighty genius! creator of the never-to-be-forgotten Shylock! Why the Jew would have been contented with his pound of flesh, while the Gentile—

But I turn from these odious topics, I trust, for ever; nor should I have wasted so much attention upon them, had I not thought it might be expected by my friends that I should expose the misrepresentations and fallacies behind which the other parties have attempted to shelter their conduct.

I have the honour to be, Gentlemen,
Your faithful servant,
JAMES BLUNDELL, M. D.
1, Great George St. Westminster,
Dec. 4, 1834.

* See the last scene in Marriage A-la-Mode.

THE CONCOURS.

To HENRY WARBURTON, *Esq., M.P.*

SIR,—The effects of patronage, as defined and developed in my address of Nov. 30th, may be reduced under three general heads,—retardation of scientific improvement, discontent, and deterioration of the moral character of the medical profession. For these evils, and the innumerable ills to which they lead, there is one common cause which deprives men of the power of self-advancement by fair and honourable means, and places their promotion in the hands of persons who are either unwilling or incapable of exercising the trust reposed in them, with justice and efficiency. In other words, the system of patronage is a system of unmixed despotism in the hands of the individuals by whom it is conducted, and of unmitigated slavery and injustice to all those who come under its influence. A few no doubt may and have, by extraordinary abilities and application, triumphed over this noxious system, while, in other rare instances, personal merit may accidentally have been the object of its protection. It may have occasionally occurred, that it suited the views of a College, an University, or some other body possessing this power, to exercise it in favour of those who deserved promotion; but though such cases might be cited, it should be recollected that they are exceptions to a law having a directly opposite tendency. Besides, admitting that this power was in most cases duly exerted, it is to be recollected that it is vested in the wrong authorities until it is placed under the control of the persons whose interests it directly affects; for, omitting the consideration of the peculiar impropriety of such an arrangement in the medical profession, it is obvious, and would only be in keeping with the spirit of other British institutes, that so extensive and important a department of society should not be at the mercy or disposal of any person or corporation which is irresponsible for its acts.

It may, however, be objected, that the medical profession is not worse off in this respect than the other learned professions in which promotion is conferred on similar principles, as in the church and at the bar. To this objection the reply is simple and obvious—the cases are not parallel or analogous. In the latter, the public are competent judges of the merit of the individuals to be promoted: in the former the public are not so. In the profession of the law, for example, the nature of the duties to be performed by its professors almost, if not entirely, precludes the possibility of mediocrity of talent, or deficiency of information, ever obtaining an ascendancy (at least through the patronage of the public) over real merit. Law courts are open arenas, and every case pleaded therein is a contest in which all who choose may judge for themselves of the qualifications of the respective advocates. There, intellect, information, and industry, must ultimately succeed, and meet their legitimate rewards. In medicine, the very reverse of all this takes place. There the public are totally unacquainted with every professional and personal quality required for the practice of that science. There is neither judge, jury, nor spectators, looking on to take cognizance of the manner in which the physician or the surgeon performs his duties; the patient is dispatched or restored to health without any one being the wiser, except the practitioner himself, while he, too, is often ignorant of what is done by his own hands. Of promotion in the church it is almost unnecessary to speak. In one great department of it, in which Episcopacy prevails, patronage is exercised by authorities who, being presumed to be infallible, or inspired, in their judgments of individual merit, can neither err, nor furnish a standard of imitation in a case in which mere reason and human judgment are expected to decide. Neither the King, therefore, nor the Pope supplies us with a model of patronage which we might hope to follow with advantage; while, in another department of the church, in which Presbytery prevails, and in which some approach to a rational system of promotion is made, appointments are principally elective, or under the control of the entire body of persons who have adopted that system of ecclesiastical government. Supposing, however, the case of the medical profession to be parallel with those of law and divinity, the objection would be valueless, inasmuch as there is as much abuse and as much complaint in those professions as there is in the profession of medicine, relative to the distribution of patronage. The admission of the objection, therefore, would merely amount to the justification of one bad system by the example of another equally preposterous. The advocates, then, of this mode of conferring appointments may search in vain for arguments to support it, either in its consequences, in abstract reasoning on its merits, or in precedents drawn from any other learned profession.

It therefore becomes a question of necessity how this system is to be removed, and a better substituted in its stead. It is obvious, from what has been

already stated, that medical patronage cannot be exercised justly at present by the persons and authorities who have the power of disposing of it; and that whatever scheme of dispensing it may be adopted to give satisfaction to the public and the profession, must possess the essential quality of leaving every man to look to his own exertions as the sole means of his promotion or advancement in life. On this principle the whole question rests; on its adoption depends the success of whatever change may be made in the government of the medical profession. To secure the benefits of the operation of this principle, two requisites or conditions are necessary:—the selection of a competent and controllable tribunal, and the establishment of promotion by the examination of individual merit. In other words, we have arrived by a chain of reasoning (the links of which, though perhaps not so closely connected as they might be made, are yet I trust sufficiently so to warrant our conclusion) at the institution of what has been called the concours, of which I shall offer a few preliminary remarks previous to a further recommendation of this ordonnance.

I am quite aware of the general prejudice which exists against the introduction of this institute as a part of the economical machinery of the medical profession into these countries. Many of those who have been interrogated by you on the subject, have either condemned it altogether, or reluctantly conceded its utility and justice. Nor is this to be wondered at; for we have been educated under a system which, unfortunately for the respectability and peace of the medical profession, did not teach us to look to our own deserts alone for our advancement. On the contrary, we were brought up under the demoralizing influence of a system which taught us that the acquaintance of a "great man," that the favour of a corporation, the smiles of faction, the sympathies of sectarianism, or the clamour of the mob, were infinitely more efficient means of pushing us onward in life, than even the possession of the most splendid abilities, or the most extensive acquirements of industry. Our hopes, our plans, our prospects, have been all, more or less, based on the unsound and unworthy foundation of extraneous patronage; and we naturally fear, if we do not hate, the healthy agitation of intellectual and independent competition, which might bring the straw-built fabric of our schemes to the ground. In fact, we have been so long immured in the darkness of prejudice, ignorance, and corruption, about this question, that now the light of truth with respect to it is painful to our sight.

This, Sir, however, is the true cause of any hostility which may have been expressed to the institution of the concours in these countries. The opponents of this measure know full well, that if there had been such an ordonnance existing in Ireland, Mr. Colles could not have gone into the chair-market, and bought up a professorship in the College of Surgeons from Mr. Halahan; had there been a concours in Dublin, Mr. Cusack might have risen to the rank of registrar in *Stevens' Hospital*, but he could never have been appointed to the surgeoncy of that institution while yet little better than a student; had there been such an ordonnance, the appointment of "Master Willy" the other day could never have been effected between Mr. Cusack and his father; nor could the disgraceful but ludicrous spectacle of a professor in the College of Surgeons being obliged to commence a course of lectures on surgery, by beginning with the diseases of the urinary organs, in consequence of his coadjutor Mr. Colles, who was in the habit of giving the lectures on "pain, heat, redness, and swelling," being ill at the opening of the present session! No, Sir, if the concours had prevailed here, neither these, nor the thousand other ills of which they are but specimens, could ever have occurred among us in Ireland.

Were it necessary to enforce the recommendation of this system of self-patronage by a display of precedents, France would furnish me with numerous and splendid examples of the beneficial consequences of this mode of promotion. I need not more than allude to the record of a competition of this kind in the capital of that country, recently published in this Journal, to revive in the public mind the recollection of an exhibition of talents and of learning for which it would, in these countries, for some time at least, be difficult to find a parallel. It is, however, unnecessary to refer to foreign precedents in support of the principle of public competition; fortunately we have an illustration more suitable to our purpose in one of our own learned institutions. In the University of Dublin this principle has been in operation many years, in the appointment of its fellows, and with the happiest results. The mere form of the election (if that can be called an election in which the man of most merit appoints himself) we need not describe: it consists of an examination of the several candidates, publicly, rigidly, and impartially conducted. There is no favour, no interest, no hole-and-corner doings,—the whole scene is one of fair competition, in which the vic-

tor has no one to thank but himself for his success, while the disappointed are deprived of all just grounds of complaint. It is possible, indeed, that the best man may not succeed in such an ordeal; the best answerer always does; and this is all that ought to be expected from any human tribunal. I have now been conversant with this practice in the University of Dublin for several years; I have been present over and over again at these examinations; and I have neither seen, on these occasions, any just grounds of dissatisfaction, nor heard the decisions of the examiners called in question. But to the practice as recommended to us by the example of the University of Dublin, it might be objected that it has failed of producing or securing able men in that institution. The imputed deficiency of its Fellows, however, is a gross exaggeration. We could point to a long list of names, in past and present times, for the refutation of this popular calumny. But admitting that the objection were true, still it would not alter the justice of the principle of competition which has, in this case, fully satisfied both the public and the persons directly concerned, that, out of a given number of candidates examined on particular subjects, those who answered best were always appointed. If the Fellows of Trinity College were deficient in the qualifications necessary for the performance of their duties, it is not to be attributed to the mode in which they are elected. The paucity of their literary and scientific labours is more justly attributable to the absence of the stimulus of exertion, in consequence of the superabundant wealth of the establishment to which they belong; and, in some cases, to the long and excessive application to study in preparing for examination,—application, indeed, which not unfrequently unfits its victim for any other mental labour in after-life.

Another objection, however, of a different kind, has been made to the introduction of the Concours. It has been stated by those whose dislike of this system gives a bias to their judgments, that supposing it to be established, persons would not be found to comply with the ordonnance. The assumption is perfectly unfounded: there are many young men in the medical profession of Ireland at this moment who are most anxious for an opportunity to stand the test of fair competition,—who desire nothing more ardently than the enactment of a law which would remove them out of the blighting influence of patronage, and make them the proper arbiters of their own success. Let not the opponents, therefore, of rational reform, and of the institution of the Concours, console themselves with this delusive expectation: they will find that the moment the course is opened, there will be numerous candidates not only to enter the lists, but to distance the slothful and selfish votaries of the whispering scheme of promotion in the race.

I have thus, Sir, attempted to show that the present system of promotion leads to ignorance, demoralization, and discontent, in the medical profession, because it is based on the erroneous principle of placing men of real merit at the mercy of prejudiced or incompetent tribunals. I might have supported the probability, if not the truth of this position, by numerous examples from the past and present history of the profession; but to do so would be to trespass farther on your time than the self-evidence of this position seems to demand. I only claimed for it that attention which a subject of so much importance requires, and will of itself secure, certain that the more it is considered the more rational it must appear; and that the more extensively the proposal founded on it is brought into operation, the greater will be the advantages secured to the profession itself, and to society in general. To what extent the principle of the Concours should be applied in the distribution of medical situations, I have not ventured to offer an opinion: it is a question which requires much deliberation, from the difficulties which it necessarily involves. Were I to say to what extent the Concours should be employed for this purpose, I would have it applied to every case in which public duties were to be performed, or for the performance of which the public money was to be paid. The machinery by which it may be worked, in particular instances, may be readily made to take in all others, no matter how insignificant. What the nature of this machinery will be it is for you, assisted by the suggestions of the enlightened and liberal portion of the medical profession, and the power of Parliament, to determine and effectuate. One thing at least is certain, that without the adoption of the principle of the Concours we can have no efficient reform of medical abuses in these countries.

I have the honour to be, Sir,

Your obedient servant,

ERINENSIS.

Those who oppose election by concours are generally persons who would not succeed at the trial. They parade the "timidity of able men!" If a man thoroughly know a science, judges of that science can detect his knowledge fast enough anywhere. The dread of "timidity" in candidates is a bugbear.

THE LANCET.

London, Saturday, Dec. 13, 1834.

THE attempt to infuse a little modern vigour into the mode of governing *Christ's Hospital*, has already been so successful as not only to be productive of benefit to the lads in the establishment, but to the children of a larger growth who figure as almoners, and as members of the managing Committee, in that important institution. How it has happened that the unfortunate blue-coat boys have been denied the use of a fresh vegetable diet for so many years, it is impossible to say, or even to conjecture, unless we are to infer that a portion of the city "animals" mentioned in the Tory journal, the *Standard*, have been entrusted with the culinary conduct of the Hospital.

Philosophers have long since admitted that *instinct* is a self-acting principle, which does not admit of improvement, or alteration, from the examples which are furnished either by experience or education; while *reason*, on the contrary, the great mental prerogative of man, is susceptible of both these changes in an eminent degree. Without, then, contending that the almoners of *Christ's Hospital* have, for several generations past, belonged to the brute creation, we are compelled to make the disagreeable acknowledgment that their conduct has been so far "animalized" as to evince no one sign of improvement from increase of years or the growth of knowledge around them, the unhappy proof being furnished by their requiring the children to subsist on a diet, the use of which is interdicted by every sound principle of common sense,—by every just feeling of humanity.

When will the odious, the baneful system of elections for life be exterminated in our corporate institutions? Never, we fear, until the intensity of the light which must flash through the antiquated windows of those establishments, has sufficiently dazzled and unnerved the abettors of abuse, to coerce them into a compliance with practices of a more healthful and constitutional tendency.

By the morbid senses of the controllers of most of our corporations, every alteration, however beneficial it may be, is regarded as a dangerous innovation,—a source of apprehension which is invariably the accompaniment of the fears and timidity of second childhood. If these men had but sufficient strength of mind left to enable them to reflect with energy and comprehensiveness on the varied scenes of life, they would at once discover that everything human is subject to change, and that as it is the great business of man to better his condition, in whatever state of life he may happen to be placed, one of the chief principles of human action is that of innovation. Thus, knowledge is unceasingly combating with ignorance, and those individuals who advance not with the tide of human improvement, become themselves the most disgraceful of all innovators on the great ocean of reason. They are for imprisoning the imagination in the dark recesses of mouldering corporations, and contend for the propriety of making the past ages of life a blank, by excluding all the benefits which may be derived from the wise admonitions of centuries of experience. What a pity that the ring-worm should be cured in *Christ's Hospital*! The disease is identified with the establishment, and its existence has, doubtless, become a subject of exultation with several of the life-elected almoners. A fine crop of hair, and a sound scalp, must be sources of annoyance to the perceptive faculties of those sapient gentlemen who have so long banished esculent vegetables

from the tables of the children, and who, at the same time, in order to counteract the refrigorating effects of bareheadedness, have required the children to eat, daily, a certain quantity of animal food, cooked, with delicate nicety, to a cinder. Burnt beef and mutton! What a repast for boys at that period of life when their bodies should be in the vigour of health and growth!

But it is necessary that we should introduce our readers to the proceedings of the Special Court which was lately held at *Christ's Hospital*, to receive the decision of the Committee of Almoners on the report which was lately presented to that body by the Special Committee appointed by the whole court of governors, to inquire into the efficiency of the medical department, and to discover, if possible, the cause of the long continuance of ringworm, both at the Hospital and in the establishment at Hertford.

The almoners' report having been read at this meeting, it was ordered that it should be printed, when a vote of thanks was given to those almoners for the trouble they had taken, and for adopting so many of the recommendations of the medical gentlemen who were examined by the Special Committee. A motion of this kind was characteristic of the persons and the place. The almoners are thanked because they no longer force the children to eat cinders, and because they allow the unfortunate lads to live in a manner somewhat resembling that of other children!

If the almoners deserve thanks, what are the members of the Special Committee entitled to receive; and, more particularly, what commendations does that governor merit who first mooted the question, and who resolved to persevere in the pursuit of his benevolent object, until the cause of justice and humanity should triumph? Every parent who is at all interested in the inquiry will feel deeply grateful to that gentleman, to the members of the Special Committee, to the medical gentlemen examined by them, and, of these latter, to Mr. PLUMBE in particular, for the ability and industry displayed in prosecuting the investigation to a successful issue. But the treasurer, we apprehend, thinks far otherwise, as he complained in the presence of the whole court, of the "too-great zeal of some of the governors, "who," he said, "interfered with the "powers vested in the Committee of Al-"moners, which latter body," he remarked, "were elected for life, according to *an-"cient custom*." Aye, an "ancient custom," truly!—so "ancient," that it would be "more honoured in the breach than in the observance." The almoners are elected for life; the children eat cinders; they are denied the use of vegetables; they have no covering to their heads,—all natural enough, and in perfect accordance with what might be expected from "ancient custom." Nothing, therefore, could be more monstrous or unreasonable to the perceptive faculties of the treasurer, than that any governor should so far interfere with the powers of the Committee of Almoners,—the life-elected gentry,—as to attempt, by individual exertion, to amend a system of management which could not, by any possibility, be made worse. "The ring-worm," said the treasurer, "has undoubtedly ex-"isted here these hundred and fifty "years," and we marvel why he did not appeal to them in favour of maintaining that striking and fashionable characteristic of *Christ's Hospital*, the ringworm,—the **Venerable Ringworm.**

When the treasurer deprecated the zeal of the humane governor who first directed public attention to the abuses in *Christ's Hospital*,—to the flagrant mismanagement which had not only so long been *tolerated*, but which had even been *fostered* by the Committee of Almoners, he should have

explained in what manner the sought-for benefit could be obtained, except by the interference of individual governors, assured as he had been, by experience, that the almoners were themselves the parents of the mischief. Whenever a gentleman steps forward in any of our ancient institutions to correct an evil, of ever so pernicious a tendency, quite certain is it that he brings upon him the hostility of the self-elected rulers, who cannot brook any interference in their affairs, save that of feasting and gorging with them at the dinner-table. *Christ's Hospital* is one of the most noble and interesting establishments of this country, and when we reflect on the influence which it exercises on the destinies of hundreds of persons of learning, and the wealth belonging to it which is in the bestowal of the governors for the accomplishment of the great object which the founders of the hospital had in view, we are forced to declare it to be most disgraceful to the Committee of Almoners to become the chief instruments in perverting the powers of the establishment.

Although, then, we are willing to admit that something has already been accomplished in the way of improvement,—although we rejoice, in conjunction with the children, that the scholars are brought back to the use of food fitted for human beings, still we consider that it would be most unjustifiable to charge those governors who may continue to interfere, in their individual capacity, for the purpose of effecting a greater improvement, with being actuated by an excess, or indiscreet portion, of zeal.

But to return to the proceedings of the general court. The president read a letter from "a governor, announcing that "he had visited Hertford, in company with "a medical gentleman of much experience "in ring-worm, who had inspected the "boys, and who reported that although "he found more than three-fourths of "them affected with the disorder, in some "form or other, he (the medical gentle-"man) believed that if proper treatment "were adopted, the disease might be "eradicated in a few weeks."

"In a few weeks!" whispered the almoners, who were, doubtless, astonished at the bold and dangerous announcement. "What!" they might have said, "get rid "of a disease in a few weeks, which has "existed in this institution a hundred and "fifty years! It cannot be endured. "This medical man must be a Destructive. "We must proceed *gradually* in the work "of reform, and not permit so daring an "innovation to be practised." The governors coincided with the almoners, and agreed that the treatment of the children *should be left to the operation of that system which had had fifty years' experience of the peculiarities of the malady.* If a Governor had visited Hertford in his individual capacity, so had one of the Committee of Almoners, only the day before; and what was *his* report? Why that he found the establishment in the most perfect possible state; that it was a model of perfection; that he found the boys healthy and happy; and, he might have added, that the **Ringworm**, that ancient institution, was as flourishing and vigorous as ever. Of course the almoner did not consider that the ringworm had any connexion with the state of the health or the hair; nor did he believe that a defective state of the health in conjunction with defective diet, in any way tended to produce ringworm. He would scorn to harbour such thoughts. He burdens not his mind by reflecting on the subject, but seeing the boys capering and laughing, he finds a full compensation for their loss of hair and scalp in the hilarity which the model-of-an-establishment exhibited. The joy and the inference, however, are alike delusive.

Towards the conclusion of the meeting, a gentleman remarked that there was abundance of cause for inducing the Governors to interfere, and that the only way to satisfy all parties was to institute a complete reform in the constitution of the Committee of Almoners. This could be effected by adopting a system of rotation, which would admit annually of the infusion of fresh energy and intelligence in that body, and thus lead to the most beneficial changes in the institution.

The President assured the Governor that the subject was then under consideration, and that a report would be ready by the next court day, suggesting such alterations in the formation of the Committee as would give general satisfaction. This announcement was cheered; but we think the approval of it indicated more precipitation than wisdom. "The *subject*," says the President, "is *under* consideration." If, then, it be not yet considered, how could the President state that the report would give general satisfaction? The Governors must not deceive themselves. It is not in the nature of a self-elected body to originate a sound system of reform. Whenever such parties commit suicide, it is by adhering with the most unyielding pertinacity to those abuses which have raised them to their offices, and given them a pernicious influence, the maintenance of which they have felt has conferred upon them a certain degree of power. If such men were really desirous of placing the Governors of the Hospital on a more enlarged, liberal, and secure footing, they would *at once* propose that two-thirds of the almoners should go out annually, and that their successors should be elected by the body of Governors,—one-third, only, of the retiring almoners being eligible to re-election until after the expiration of one year. If a body of men thus constituted were to be intrusted with the control of *Christ's Hospital*, a fresh vegetable diet would not be again banished from that establishment; the heads of the children would be protected by an appropriate covering; their scalps would be as free from disease as the heads of boys in well-regulated institutions; and we should hear no more of eating cinders on rough blocks of wood.

Independently of the cruelty and inhumanity of subjecting the children to such an unnatural diet, and withholding from their heads that protection which the climate of this country demands,—alike against the sun in summer and the cold in winter,—every circumstance which interferes with the progress of education in the establishment ought at once to be condemned and removed, because *Christ's Hospital* ought to be regarded as one of our national institutions. Let those excellent and able Governors, therefore, who have tortured the self-perpetuating almoners into a partial discharge of their duties to the children, continue, unremittingly, their praiseworthy and benevolent exertions; and let them rest assured, that to whatever insults or indignities they may be subjected *in* the establishment, *out* of it not only will they be rewarded with the gratitude of the parents and relatives of the ill-managed children, but the value of their labours will be generously acknowledged by the enlightened public.

We cannot take leave of this subject, even for the present, without calling on the medical officers of *Christ's Hospital* to publish a detailed report of the medical treatment to which the children of the establishment have been subjected for the cure of ringworm. Should they neglect to comply with this request, the omission may bring upon them an undeserved share of censure. Concealment, in such a case as this, is a disgraceful violation of the rights of society.

In our last number we noticed certain circumstances by which the advantages of Paris, as an anatomical school, have latterly been very considerably diminished. Since then the prefect of the police has promulgated an ordonnance, diminishing still further the facilities enjoyed for dissection, especially in the amphitheatres attached to the different hospitals. By this decree all private dissection is absolutely forbidden in the city of Paris. No one is permitted to open an amphitheatre for the purpose of professing anatomy or operative surgery; and dissections and operations are also forbidden to be practised in the different hospitals, &c., where the *internes* hitherto have been in the habit of performing them. This measure particularly affects the amphitheatres attached to the *Salpetriere*, the *Bicetre*, and the *Enfans Malades*, and its application to these localities is justified by no considerations of public hygiene, while it deprives many pupils of the opportunity of pursuing their anatomical studies with little loss of time and money.

Dissections and exercises in surgery are permitted only at the amphitheatre of the school, and at that of Clamar; and these two establishments are to be shut between the months of April and November.

Thus an immense mass of pupils is collected together in two localities, instead of being distributed amongst several, and the amphitheatres are to be closed, upon pain of a *proces-verbal* against offenders, during no less than five months in the year.

PHRENOLOGY.—Professor Ideler, physician to the great Hospital for the Insane at Berlin, thus speaks of this science in reviewing a German translation of Combe's system.—"We certainly will not say that the phrenologists have succeeded in determining every individual faculty, or that they have entirely avoided mistakes; but the defects in their science will easily be remedied in its further progress, and in no degree affect its *spirit*. It already offers a treasure of well-founded reflections on the formation of character, and on the means by which the predominating faculties of the mind are directed and restrained. It is beyond all doubt that a doctrine which reduces the study of character to scientific principles must be welcome to us, for no system of mental philosophy can be of use where peculiarities in individuals give way to *general* considerations."

Memoir on the Extirpation of the Uterus, &c. By SIGNOR CARRON DU VILLARDS. Bologna, 1834.

THIS is one of those brochures which contains a complete view of the actual state of our knowledge on the subject discussed. The memoir was honoured by the *Medico-Chirurgical Society* of Bologna, and gives us an opportunity of succinctly describing extirpation of the uterus, the cases in which the operation is demanded, and the most eligible method of performing it.

It is unnecessary to notice the numerous cases in which extirpation of the uterus was said to have been performed by the older surgeons; the greater part of those cases is fabulous, or only a portion of the uterus, a polypus or other tumour, had been removed by the operator, while he imagined that he amputated the totality of the organ. Thus SLEVOGT, having removed a large tumour from the vagina of a lady, found upon examination that it was merely composed of a dense capsule, containing the uterus. The patient recovered. CLARKE removed a prolapsed uterus by the ligature, which he mistook for a polypus. A distinguished French surgeon, according to PETIT, committed the same error. CHARLES JOHNSON also extirpated the uterus for a polypus, and PALETTA once removed the whole of the organ, while he thought he was merely extirpating a carcinomatous tumour of the lower part of the uterus. These examples not only show how readily the surgeon may fall into error in this respect, but also indicate the difficulty of distinguishing what is true from what is false in the writings of the older surgeons. It is remarkable that the operation in the earlier times was always performed for prolapsus or inversion. There is no example, until very lately, where extirpation was employed against scirrhus or simple cancer, uncomplicated with either of the two accidents just mentioned.

The three cases requiring extirpation of the uterus are, 1st, prolapsus of the organ; 2nd, inversion or retroversion; and, 3rd, scirrhus or cancer. Let us consider briefly each of these heads.

Prolapsus of the uterus is the accident

most frequently demanding extirpation of the uterus, and one for which the operation was recommended by Ætius and Paul of Ægina, after Soranus, the first author of antiquity who speaks of it. The process ordinarily adopted consisted in first placing a ligature round the organ, and then amputating it below the ligature; the ancients touched the wound with the actual cautery; others use caustics, &c.; but most operators are content with the ordinary means of arresting hemorrhage. Some applied the ligature very high up; but Rousset was one of the first who justly blamed this method, as exposing the patient to the danger of ligature of the urethra (this happened in an operation of which Ruysch speaks), the bladder, or displaced intestines.

In many cases, however, the uterus was extirpated without any previous ligature; in one related by Ambrose Pare the lady was cured, but died three months afterwards of a peripneumonia. Langenbeck extirpated a cancerous uterus, the vaginal portion of which projected beyond the labia. This operation made a great noise at the time. After having divided with a scalpel the connexions of the vagina and uterus, Langenbeck dissected away the peritoneum from the uterus, taking care not to wound the membrane, and leaving attached to it a thin layer of the tissue composing the fundus uteri. The hemorrhage was copious, and arrested with great difficulty; but the patient recovered, and lives at the present day. The simple ligature without excision seems to have been less frequently employed. A lady, twenty-eight years of age, whose case Blasius gives, affected with prolapsus of the uterus, died three days after the application of the first ligature. Marschall of Strasbourg also tied a prolapsed uterus affected with cancer; but the violent pain which supervened compelled him to remove the ligature on the second day, and proceed to amputation. There was no hemorrhage, and the patient survived ten years after the operation. Finally, Ruysch relates a fatal case, where the urethra was compressed in the same ligature as the uterus.

These are the only examples of simple ligature which the author professes to know.

The results of extirpation of the uterus in cases of prolapsus are in general favourable; in fact, the patient has rarely died, unless the organ had become cancerous, or the patient was affected with some other disease, or, finally, unless the operator committed some grave error. As to a choice amongst the different methods employed, we may remark that Langenbeck's exposes too much to the danger of hemorrhage, and of wounding the peritoneum or viscera. When the ligature is employed, the author, contrary to the opinion of most surgeons, prefers drawing it at once tight, in order to destroy the sensibility at once. Perhaps when the prolapsus is great, it may be advisable to pass a needle armed with a double ligature through the centre of the organ, and thus tie it on either side.

Inversion or retroversion of the uterus is also an accident which frequently requires its extirpation, which may be performed with the simple ligature, or with the ligature and knife; and which is either partial or total. The examples of the operation are numerous, and, unfortunately, so are those of the errors committed in the diagnosis of the accident.

Thus a sage-femme (Wrisberg. Com. de Uteri, &c.) having produced an inversion of the uterus, mistook it for a placenta adherent, and cut away the body of the organ. The patient recovered notwithstanding the violent hemorrhage which followed. Another sage-femme having taken the inverted uterus for a mole, removed it, and the patient expired on the spot. (*Annal. de Lit. Méd. Etranger*, t. xv.) In a case of Bernhard, amputation was successful. The ligature, followed by resection, is the method almost universally adopted in cases of inversion, and is frequently followed by a cure; the author quotes, as examples, the cases of Vieussères, Baxter, Baudelocque, Dessault, and one related by Sir A. Cooper, in the *Med. Chir. Trans.*, vol. x.

The ligature has been employed without the knife. Newham extirpated the uterus with success in a case of chronic inversion, without having had recourse to a cutting instrument; and Faivre relates a similar example (*Journ. de Médic.* 1786). Johnson (in *Dublin Hospital Reports*, vol. iii) gives two cases where extirpation was performed by the ligature alone; both were successful.

It is much disputed who was the first to recommend and undertake extirpation of the uterus in cases of cancer uncomplicated with any displacement of the organ. It would appear, however, that Wrisberg (*Loco. Citat.* p. 22) first distinctly proposed to combat cancer of the uterus by extirpation, and that Osiander was the first to put it into execution under the circumstances alluded to.

The different methods employed may be

distinguished into those where the removal of the organ is partial, and those where it is complete. OSIANDER always dreaded the complete extirpation of the uterus, and never removed with a cutting instrument more than the lower portion. He was the first who proposed to facilitate the operation by drawing down the uterus with ligatures, though he afterwards gave up this practice.

RUST was the first in Germany who imitated OSIANDER. PALETTA also performed OSIANDER'S operation in a case of sarcoma degenerated into cancer; but on examining the tumour he found it composed of the whole uterus in a state of procidentia. GRAEFE removed the lower portion of the uterus in a case of cancer, and his patient recovered. In 1815 partial amputation of the uterus was introduced into France by DUPUYTREN; but he soon renounced the knife for the actual cautery. Since that period partial amputation of the uterus has been performed with the most brilliant success by M. LISFRANC, RECAMIER, and other French surgeons.

We have already given in another number a complete description of LISFRANC'S method of partial amputation. M. HATIN has invented an *uterotome*, and various other instruments for facilitating the operation, but it does not appear that their utility compensates for their want of simplicity. M. COLOMBAT has invented an *hysterotome*, but his instrument has not yet, as far as we know, been employed on the living body.

Finally, MAYOR, of Lausanne, would remove the neck of the organ by means of a hooked forceps, a post-nœud, and a tourniquet of his invention. Partial amputation can of course only be applied to cases of cancer, where the disease is confined to the neck of the uterus; but when the body of the organ is attacked, a more grave operation becomes necessary. The opinion of surgeons is much divided on the propriety of attempting to extirpate the organ completely; the operation is strongly condemned by WENZEL, ZARY, &c.; however, it has been practised once by SAUTER, twice by SIEBOLD, once by HOLSCHER, four times by BLUNDELL, three times by RECAMIER, three by LANGENBECK, once by DUBLED, and once by DELPECH. In SAUTER'S case the patient survived the operation four months, and was carried off by an attack of the lungs. SIEBOLD'S and HOLSCHER'S patients died of peritonitis. LANGENBECK performed his first operation in the following manner:—he divided the linea alba from the pubis to within two inches of the umbilicus; then the abdominal muscles, and finally got into the cavity of the peritoneum; an aid sustained the intestines and bladder; the operator now introduced his left hand into the abdominal cavity, seized the uterus, and, with a long scissars made for the purpose, separated the ovaries from the uterus; he then drew up the organ, and with a bistoury divided its adherences to the vagina; the operation lasted only seven minutes. There was little or no blood lost by the vagina; the patient, however, died of peritonitis thirty-two hours afterwards.

LANGENBECK performed his second operation by the vagina; he commenced by dividing the fourchette and perinæum, in order to have more space; he then divided, with the isterotome of OSIANDER, the right side of the vagina; then introduced the fingers of the left hand between the rectum and uterus, and divided the peritoneum at the semilunar folds with the isterotome, and enlarged the wound towards the bladder; he then seized, between the fingers, the fundus uteri, turning the back of his hand towards the abdominal cavity, and depressed the organ on the rectum; the broad ligament was thus put on the stretch and divided; the connexions of the uterus with the bladder were now divided, and the organ was brought out through the vulva. The operation lasted a quarter of an hour, and the patient died of periton it is in forty-eight hours.

RECAMIER, in his first operation, commenced by drawing down the uterus; he then divided the upper part of the vagina transversely, and separated the uterus from the bladder with his finger; he then opened the peritoneum with the bistoury, so as to admit two fingers; he then divided, with the same instrument, the ligamentum longum on the right side, after having placed a ligature on it; he did the same on the left side, and; finally, brought down the uterus through the vulva. This patient survived for twelve months, when she was carried off by an obstinate diarrhœa.

The two other operations performed by MM. RECAMIER and ROUX were unsuccessful.

DELPECH followed the recommendation of GUTBERLET, and commenced his incision above the pubis; unlike LANGENBECK, however, he made a semicircular flap on the lower fourth of the linea alba; this part, with the peritoneum, were opened; the connexions of the uterus and vagina were separated in the usual manner; the peculiarity of the operation consisted in the passing of a metallic ligature round

the upper part of the vagina, so as to close the cavity of the abdomen in this part. The patient died on the third day, and it was found that the bladder had been slightly injured. There was no trace however of extravasation of urine, or of peritonitis.

Thus we have a collection of seventeen cases, all well authenticated, of extirpation of the uterus, and all were immediately fatal, with the exception of two of M. Recamier and Dr. Blundell. The result is by no means encouraging, but when we consider the gravity of the disease for which the operation is performed, even the feeble success already obtained justifies a further trial.

ITALIAN MEDICAL JOURNALS.

We have already given the most interesting particulars contained in the last of these journals which have reached us. The other matters contained in the July and August numbers of the *Annali Universali di Medicina* are, 1st. The Medico-Statistical Topography of the Provinces of Sondrio. 2nd. A Statistical View of the *Hospital of Foundlings* at Mantua, for 1833. 3rd. A continuation of some Researches into the Causes which have Impeded the Progress of Medical Reform commenced by Razari in 1800. 4th. A Medico-legal History of an Empyema which destroyed the whole of the right lung. 5th. Some Medico-legal Questions addressed to Professor Pucinotti. 6th. A case of singular cure of Anasarca complicated with Ascites. 7th. A History of a Monstrous Fœtus, possessed of Two Bodies. 8th. An Article on the Life and Writings of William Corvi and Cornetio Donzellini. We select from these the 6th article, which is communicated by Dr. Podrecca, of Padua.

SINGULAR CURE OF AN ANARSARCA.

The patient was attacked with anasarca and dropsy after typhus fever. His body was completely infiltrated, and he was reduced to a perfect state of inaction. He had tried in vain various remedies, when some one advised him to apply to the abdomen a certain number of the domestic toads, and to second their action with frequent friction.

During three days the patient had recourse to this disgusting application. Thirty-six toads were put on, and renewed every now and then, and the extremities were submitted to powerful friction. On the second day abundant stools were the result of this new remedy. There was alternation, with a copious discharge of urine. The toads were continued with a similar effect, and in a few days the man was cured of both affections.

History of a Double-bodied Fœtus.—This case, which is related by Dr. Angelo Bossini, is remarkable, not for the anatomical details, but for several obstetrical circumstances accompanying the delivery, of an interesting nature:—

The mother, 43 years of age, had given birth already to several healthy, well-formed children. She had been in labour for some hours, when M. Bossini was called in. He found two feet projecting in the first position from the vagina: the accoucheur at once introduced his hand to bring down the arm; he seized an extremity and brought it out, but it was a foot which had been turned upwards. The idea of twins was now naturally adopted, but the finger soon discovered that this new leg belonged to the same trunk as the two others: a fourth leg was extracted, and traced up to the common body. The trunk was slightly rotated in order to reach the arm, which was brought down; the finger was now introduced into the mouth and the head rotated into the sacrum by depressing the chin, but the operator at this stage discovered behind two vertebral columns; the manœuvres were nevertheless continued on the head first seized, and in a few minutes both heads were expelled. The fœtus presented two heads and two necks united to a common trunk; there were only two arms: behind were two perfect vertebral columns; there were two anuses and two genital regions, both belonging to the female sex. The fœtus weighed 20¼ oz.

The *Filiatre Sebezio* contains, 1st, a letter of M. Rognetta, of Paris, on the causes of non-reunion of fractures, with the immoveable apparatus of Larrey. 2nd. A case of luxation of the humerus on the fore-arm, by Antonino Frera, of Reggio. 3rd. A memoir on two diseases not yet described. 4th. An article on the mode of action of asafœtida. 5th. An essay on symphyseotomy, by Professor Petrunti.

COMPOUND DISLOCATION OF THE ELBOW-JOINT.

This case shows the advantages which may sometimes be obtained from the expectant surgery in these dangerous accidents. The inferior extremity of the humerus had been driven completely out through the skin covering the front of the joint; the surgeon reduced the bone, brought the soft parts together, and applied a simple bandage, intending to wait the next day for operating. The pain, swelling, &c. which came on induced him to defer amputation; he bled the patient, and applied cold lotions to the part; the limb now became very tumid and cold, and covered with phlyctenæ; there was great fever and delirium, with ardent thirst, &c. Under these circumstances the surgeon thought it right again to luxate the bone, in order to remove all injurious pressure; this was done, and on the following day the pain, fever, &c. were less: in a few days the integuments about the wound mortified, and the portion of exposed bone began to die. On the 21st day the surgeon removed with the bone-scissars a great part of the necrosed bone: after this operation the extremity of the bone was soon covered with healthy granulations; the surface of the wound began to contract, and in a short time the patient was cured, with loss of the motions of the elbow-joint.

We have already noticed the species of epilepsy which forms one of the cases treated of in the third article of the last-named periodical. The other is simply an hypertrophy of the whole muscular system, affecting two brothers; and the third, at the time of the author's writing, began to be attacked by the same alteration of the muscles.

REUNION AFTER COMPLETE SEPARATION.

The *Osservatore Medico* contains a curious, and what it affirms to be a well-authenticated, case of reunion of the nose, after complete separation.

The patient, a woman of the town, had the whole of the soft part of the nose bitten off, in a quarrel, by a man. She was immediately carried before the commissary of police, when the nose was dressed. Three hours afterwards, Dr. CARLIZZE, who happened to come in, saw the patient, and entreated that search might be made for the lost nose. This was done, and two and a half hours afterwards the mutilated portion was found, contracted, and all covered with filth. The Dr., however, washed the parts clean, and applied the piece, putting in a few points of suture. The dressings were not removed before the seventh day, when the witnesses observed, with great satisfaction, that complete union had taken place. In thirty-seven days the cicatrix was perfectly consolidated. The aspect of the nose, however, was most disagreeable, from the colour of its tip, which presented a livid, unhealthy appearance. A solution of nitrate of silver (moderately strong) was applied to this part, and after the fall of the eschar, in five days, the nose resumed its natural colour.

INTERCEPTED LETTERS.

[THE BARONETCY AND THE ANATOMY ACT.]

"DEAR SIR BENJAMIN,—Do not, my dear Sir, consider that the months which have elapsed since you obtained your well-merited honours, without my offering you my hearty congratulations, have passed from any coldness on my part, or a diminution of the high sense which I have always entertained of your inestimable virtues. There never was any man, at any time, elevated to the rank of Baronet under more auspicious circumstances; and believe me to be sincere when I declare to you, that I know of no pure surgeon in the metropolis who is so likely, from his whole deportment, conduct, and example, to do credit to the *order* than yourself. It is, indeed, delightful to live in a country where men who have been born and educated in the lowest grades of society, can attain the highest honours which the Sovereign has the power to confer on his humble subjects—honours which are open to all of us, whether we travel in a rectilinear or in a curvilinear direction.

"I do hope, most sincerely, dear Sir BENJAMIN, that you have made all those appropriate alterations in your domestic establishment which become imperative on one who has obtained so signal a mark of Royal favour. I hope you have smartened up your equipages, hired additional footmen, and dressed them in rich but not gaudy liveries, and that your whole *ménage* has undergone a *thorough reform*.

"But even whilst you derive, as I have myself experienced, unquestionable gratification from rank and title, you will find difficulties and disagreeable incidents occasionally cross your path. Above all, you will be exposed to the plague of a set of sycophants, hypocrites, and 'toadies,'

as they are vulgarly called, buzzing around you, and your highly elevated situation will expose you, however unjustly, to public notice and censure, and you will become, as I have myself been, an object of satire to a set of subordinates, who only thirst for our high positions, and envy our high-moral characters. You will excuse, Sir BENJAMIN, my candour on this occasion. It has arisen from my esteem for you, and a knowledge of the unpleasant and inconvenient remarks to which you have already been exposed in the late elections at *St. George's*. These events ought, indeed, to show you the necessity of exercising the greatest philosophy of temper, and circumspection in manner. Quietness and reserve are most essential to your acts, and I do hope and trust that what you have now undertaken regarding the management of the *Anatomy Act*, you will be enabled to carry through with that profound secrecy for which I, as well as your other friends who esteem you most, have ever given you credit. Mr. COOPER on the part of the medical school of *Guy's Hospital*; Mr. STANLEY, who so zealously represents the interests of *St. Bartholomew's Hospital*; and Mr. PARTRIDGE, who with equal skill takes care of those of *King's College*, will explain to you their views in detail, and it will be for you to consider how their projects can be successfully carried through. I do most perfectly agree with them in thinking, and I have ample proof of your sentiments being in accordance there with, that there are too many anatomical schools, and our united efforts must be exerted to diminish the number. I am aware that Sir ASTLEY and other members of the Council, besides yourself, have been of this way of thinking for many years, and you certainly deserved much credit for passing that spirited resolution which went the whole length of confining the profits of anatomizing to the pure hospital surgeons. It therefore becomes you now to employ such means as you find necessary to get the management of the Anatomy Act placed entirely under the control of the Lincoln's-Inn-Fields Council, and then you will have it all your own way. You may rely on every support, *sub rosa*, from our friends in Pall-Mall-East. The ruling powers of both Colleges must go hand-in-hand in this matter. If you can effect this by any means which will not make you absolutely odious in the eyes of the students and subordinates, you will receive my hearty congratulations; but great caution is requisite. Remember me most affectionately to my lady, who, I hope, is in the full enjoyment of health, and duly appreciates those high honours which have of late been heaped on her distinguished better-half. Write me word what Sir ASTLEY says. Don't intrust your secrets to any of the high-moral scribbling men about *St. George's*. They would very likely make an improper use of your confidence. Your faithful friend, in prosperity and adversity,

"H.

"Dec. 8th, 1834."

"DEAR SIR HENRY.—I thank you kindly for your congratulations. There is an air of sincerity in them which makes them most palatable. I feel assured of the truth of your remarks. I shall assuredly avail myself of your suggestions, and as far as my former habits admit, I shall use my best efforts in all my actions, sentiments, and worldly appearances, to keep up the dignity of the high *order* to which I have, by the will of a kind Providence, and the help of my friends, lately been elevated. It is unreasonable to expect that I should change in *all* things. I intend to keep as sharp a look-out after patients as I ever have done, and it was essential for me to carry through the assistant-surgeoncy matter at *St. George's*, though it cost a great deal of trouble, and much expense too. It is of the greatest importance to me to keep up my influence at *St. George's*, and keep down the *liberal* party there, as they call themselves. I have purchased a piece of ground for a new school, but it is no such easy matter to find fit teachers. The final arrangements need not be made until next session. If you have any stanch anti-reformer about whom you are interested, let me know, and I'll try to provide for him.

"As to the *Anatomy Act*, I agree with you perfectly. Certainly the only way for our friends to get some of the schools set down, will be for us to get the complete command of anatomical subjects, which we shall do satisfactorily if we can only manage to have the whole patronage taken from the Home Office, and given to the Council of the College of Surgeons. I will make use of all my efforts to accomplish so desirable a purpose; but I must not be seen in it, as it would excite great discontent and opposition with the other party, and more particularly as it would appear quite inconsistent in me to complain of too many schools when I am doing all that I can to establish a new school myself for my own purposes.

"Yours, ever, with fervid devotion,

"B. B.

"Dec. 9, 1834."

"SPONTANEOUS EVOLUTION."

To the Editor of THE LANCET.

SIR,—As the following case relates to an important point in the practice of midwifery, you will perhaps afford space for its insertion in an early number of your valuable journal.

A few weeks since I was sent for in great haste to attend Mrs. W—n who was then in labour with her second child. Upon making an examination, I found the left hand and forearm protruding through the vagina, and at the os uteri, which was considerably dilated, the scapula and upper part of the back presented. The contractions were so strong that the shoulder and a considerable portion of the back had already been forced through the os uteri. I endeavoured to introduce my hand for the purpose of bringing down the feet, but all my attempts were useless, the uterus was so firmly contracted around the child. Under these circumstances I waited for a short time in hope that the uterus would relax its efforts and enable me to introduce my hand, but instead of the contractions diminishing they were violently increased, the presenting portion of the back revolved upwards, (the hand and forearm still protruding through the vagina), the lower part of the back was forced downwards, and ultimately the breech. By this evolution, I was speedily enabled to accomplish the delivery. The case proves how great is the power of the uterus in rectifying malpositions of the fœtus, and that even after the whole upper extremity, and a considerable portion of the trunk, have passed the os uteri, the uterus still retains the power of producing the remarkable phenomenon which is sometimes called "Spontaneous evolution." I am, Sir, your obedient servant,

T. B. BARRETT.

Stone, Dec. 8th, 1834.

SECRECY OF THE EXAMINATIONS OF THE DEAD OR KILLED PATIENTS AT ST. BARTHOLOMEW'S.

To the Editor of THE LANCET.—Sir,—Allow me first to thank you for the liberal manner in which you have always advocated the cause of the student. I am sorry to have again to complain of those frequent sources of grievance at our hospital, the post-mortem examinations. At the commencement of the season, the governors built a new dead-house, and for some time notices of the post-mortems were regularly posted (thanks to your Journal); but latterly this has gradually been neglected; and for this month past not one notice has been exhibited, although examinations are daily taking place. What is the meaning of this? How are we to learn anatomy and pathology with the present scarcity of subjects and total seclusion from the dead-house? What scandalous breaches of promise are committed by those who pocket our money! How grossly they neglect our interests! Reform is, indeed, wanting at *St. Bartholomew's Hospital*. You shall hear further on the subject from your obliged servant,

A ST. BARTHOLOMEW'S STUDENT.

St. Bartholomew's Hospital,
Dec. 9th, 1834.

ST. BARTHOLOMEW'S HOSPITAL.

ULCERATED CANCER OF THE RIGHT BREAST.

JANE AVERY, aged 55, was brought to Faith Ward, Nov. 13, with a large ulcerated cancer of the right breast. The disease commenced seven years ago. At first a small lump only was discovered, which gradually increased, with lancinating pain, and retraction of the nipple. Two years since, her catamenial discharge ceased, and the tumour, after assuming a more active state, became an open ulcer. The patient is much emaciated; her countenance is anxious, and her features have assumed the peculiar sallow and unhealthy appearance which so frequently attends this malady. Pulse weak, appetite impaired; and constant pains in the axilla and breast, destroy her rest. The ulcer occupies the greater portion of the mamma, and implicates the axillary glands; its surface is very unequal, being in some places deeply excavated, and in others presenting very irregular eminences of a fungoid appearance, standing above the surrounding mass. The edges are much puckered and raised, the discharge is very considerable during the day, and the fœtor is excessive. Cataplasms of bread, saturated with the saturnine lotion, were ordered; but little relief was experienced from their use. The only remedy which appears to lessen her sufferings, is the sedative liquor of opium, diluted with water, and applied over the raw surface, and an opiate pill at night. Since the adoption of this plan, the shooting pains have been less severe, and the nights not so watchful. The patient fancies herself better; but no real sanative influence is evinced by any alteration in the aspect of the breast. The

anodyne lotion is ordered to be continued, and poultices of bread-and-water to be applied to the ulcerated surface.

AMPUTATION OF THE LEG BELOW THE KNEE.

On Saturday, December 6, a man was brought into the operating theatre, who had previously been under the care of Mr. EARLE. This gentleman now performed the above operation by the circular incision. After the dissection of the integuments and muscles, and division of the interosseous ligament, he sawed through the tibia in an *oblique direction, from above downwards*, but divided the fibula *transversely*. After securing the mouths of the bleeding vessels, the integuments were drawn over the stump, and kept in coaptation by dry sutures, over which was placed some simple dressing. On the removal of the patient from the room, Mr. EARLE addressed the pupils to the following effect:—

"This patient, Gentlemen, was conveyed to the hospital about five weeks since, his limb being injured by the wheel of a cab passing over the ancle. On making an examination, no dislocation or fracture could be ascertained; the motion of the joint was not at all impeded; and on applying pressure to the palm of the foot, no pain or uneasiness was experienced by the patient. A portion of the integuments above the ancle was slightly wounded. He stated that he was quite well, though his general health was much impaired. This might be accounted for by the circumstance of his having led an intemperate life. He was ordered to be confined to his bed, and medicines were directed to be administered, as the symptoms might demand. A short time after his admission the joint became swollen, and large abscesses began to form around it. These were opened by free incisions, and their contents were evacuated. Deep sinuses afterwards formed, and assumed a very unhealthy appearance, discharging freely from the apertures. The man, at this period of his disease, was very much reduced, his pulse became weak, and his appetite bad. A nourishing diet was ordered, with wine at intervals during the day. The general state of the patient at this time appeared to offer no hope that nature was sufficiently energetic to repair the injury the limb had sustained, and it was not only my opinion, but also that of my colleagues, that there was but one resource likely to save the patient's life, namely, amputation of the leg, which you have just seen me perform.

"You no doubt observed that I sawed the tibia in an *oblique* direction; and this manner of dividing that bone I consider to be most eligible, for these reasons;—the sharp spine of the tibia being but thinly covered by integument, the surrounding skin is frequently liable to slough; but by adopting the plan which you have just witnessed, the covering of the stump is less liable to subsequent disease. On making a section of the amputated limb, I find there is a fissure between the articulating extremities of the tibia and fibula, containing pus; and also a fracture of the base of the bone. The synovial surfaces of the tibia and astragalus are entirely denuded of their cartilage by the ulcerative process. This latter circumstance generally occasions a great deal of agony; but it is curious to remark that, in this case, the pain which the patient experienced was not of a severe kind, which is certainly an exception from what obtains in general."

Mr. EARLE then made some general observations on some of the cases at that time under treatment in the hospital. This gentleman is the only *surgeon* in the establishment who gives clinical lectures *gratuitously*.

[In last Report, p. 398, line 18 from bottom, *for* increased *read* decreased.]

CORRESPONDENCE.

Tyro Medicus.—The six months' attendance may, we believe, be given at any period of the three years.

Mr. W. H. K.—Quest. 1. We believe there is no such society in London. There is a kind of Medical Benefit Society, but it extends its aid to members only.—Quest. 2. Communications for the Editor must be sent to the Lancet Office, free from expense. Their insertion can only be decided on after examination.

We may be induced to make a few remarks on the subject discussed in the letter of *An Assistant and a Six Years' Subscriber*, next week.

A Licentiate of the Apothecaries' Company has been intreated by his friends to render into sensible English the motto at the head of his *license*,—"Opiferque per orbem dicor," but failing to accomplish the task, he begs that a translation may be publicly furnished by the examiners at the Hall.

DICTIONARY OF PRACTICAL MEDICINE.—Dr. Copland has, in a note, authorized us to state that the Third Part of his Work will be published in a few weeks, and that the *fourth* part will appear soon afterwards.